

# Section 4: Loss Control Policies, Procedures, and Practices

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## **Quick Tips**

### **Components of a loss control system**

- ☐ Proactive Policies and Procedures
- ☐ Safety policy statement
- ☐ Loss control committee
- ☐ Assignment of responsibilities and allocation of resources
- ☐ Ongoing review of accident statistics
- ☐ Periodic safety audits and training
- ☐ Accident reporting and investigation
- ☐ Safety communication
- ☐ Development and regular review of emergency and contingency plans

### **Duties of a loss control**

- ☐ Develop loss control and safety policy
- ☐ Review all accidents
- ☐ Establish procedure for reporting hazards and possible corrective actions
- ☐ Inspect agency facilities
- ☐ Prepare inspection checklists
- ☐ Coordinate evacuation drills
- ☐ Determine loss control and safety training needs and develop a plan to fulfill them
- ☐ Ensure the provision of first aid kits and protective equipment
- ☐ Develop safety incentive awards
- ☐ Develop and conduct new-employee safety and loss control orientation programs

### **Open Records**

- ☐ Determining if something is a record
- ☐ Classes/Types of records
- ☐ Determining if a record is open, confidential, or exempt
- ☐ Providing access to/disclosing open records
- ☐ Denying access to records (when and how)

### **Open Meetings**

- ☐ Determining if something is a meeting
- ☐ Classes/Types of meetings
- ☐ Determining if a meeting is open, confidential, exempt, or an executive session
- ☐ Providing notice of and scheduling open meetings
- ☐ Providing access to open meetings
- ☐ Conducting public meetings
- ☐ Denying access to meetings (how)

**Records Management System**

- ☐ Developing a Records Management Program
- ☐ Application of a Records Management System to an incident, claim, or lawsuit
- ☐ Destruction Hold Notice
- ☐ Dealing with Open Records Requests pertaining to an incident, claim, investigation lawsuit
- ☐ Destruction ramifications
- ☐ Closed files retention

**Facility Audits and Inspections**

- ☐ Inspection Checklists

**Training**

- ☐ Seminars
- ☐ Flex Training

**Dealing with Disasters**

- ☐ Establishing fire emergency, natural disaster/severe weather, and man-made disaster plans
- ☐ Developing a COOP Plan
- ☐ LDRPS/NotiFind

**State Fleet Services**

- ☐ Regulations for Operating State Fleet Vehicles
- ☐ Defensive Driving
- ☐ Operating Large Passenger Vans

**Employment Practices Liability (EPL) Exposures**

- ☐ Proactive Steps to Address EPL
- ☐ Employee Acknowledgement Form
- ☐ Responding to EPL Complaint

**Automatic External Defibrillators (AEDs)**

- ☐ Setting up an AED program.

**First Aid Kits**

- ☐ Properly equipped First Aid Kits

## 4.1 Components of a Loss Control System

Loss control is a proactive approach to preventing accidents and resulting injuries. Effective loss control, with an emphasis on safety procedures, training, and monitoring, can minimize the need for protection and recovery measures.

An effective loss control system can help an agency control costs, protect it from liability, and help it comply with standards and maintain a safe working environment.

Loss control requires the commitment of everyone at all levels — agency directors, risk management contacts, safety directors, and employees. Loss control is the commitment and obligation to do what is right.

Reducing the number and severity of losses will increase morale and improve quality, efficiency, and production.

An effective loss control system includes the establishment of a safety policy statement, assignment of responsibilities, and allocation of resources, ongoing review of accident statistics, periodic safety audits and training, accident reporting and investigation, safety inspections, safety communication, and development and regular review of emergency and contingency plans.

Each of these components should be implemented, monitored, and refined as necessary.

### Policies and Procedures

The Risk Management Division makes it a practice to encourage State entities to develop policies and procedures governing the operations of their agency. Benefits to agencies in implementing this process include:

- Evaluating how and why certain jobs are to be done;
- Assisting employees to understand how to properly perform their assigned tasks; and
- Providing a defense against a claim of negligence when state employees are performing an assigned task in the scope of employment.

The question often arises if it may be in an entity's best interest **not** to develop a policy or procedure because, if one is developed and not followed, someone involved could claim the employee was negligent. That certainly could happen. However, the failure to have an appropriate policy or

procedure could also lead to a negligence claim. Not establishing a policy or procedure for performing a task is a poor management practice and not a defense for negligence. Accordingly, the best protection against liability would be to develop policies and procedures that are applicable to the task; to periodically review those policies and procedures to ensure they are up-to-date; and to ensure they are clearly communicated to and followed by the employee performing the task.

To address those unique circumstances under which it may be inappropriate for an employee to implement an established procedure, the Risk Management Division recommends entities consider including the following disclaimer in the front of their policy and procedure manual:

Note: This manual provides a written account of how certain activities are performed and is designed to guide and assist staff in performing their functions. When appropriate, there may be deviations from these written procedures due to changes in personnel, policies, interpretation, law, experimentation with different systems, or simply evolution of the process itself. This manual may be changed at any time. Staff are encouraged to review this manual periodically and suggest changes in the manual to keep the manual current and to minimize differences between the manual and actual practices.

## 4.2 Loss Control Committees

As part of their loss control system, every State agency or facility should establish a loss control committee.

The committee chairperson should be appointed by the head of the agency or facility to act as the main contact for the entity's loss control and safety activities. The committee's other members would represent a cross-section of employees. Membership should be rotated regularly, such as annually; staggering terms will ensure continuity.

The suggested functions of the loss control committee include:

- Developing a loss control and safety policy for the entity and communicating that policy to *all* employees.
- Serving as a safety review board for all accidents or incidents involving entity personnel or property. This includes recommending to the entity head loss control and safety measures that could prevent similar occurrences in the future.
- Establishing a procedure for reporting hazardous conditions or activities and taking corrective action.
- Periodically inspecting entity facilities to see that all employees are complying with established loss control and safety practices and to identify and correct hazardous conditions.
- Preparing checklists to guide and document inspections. Sample checklists are found under subsection 4.3 of this manual.
- Implementing customized policies and procedures to address Fire, Natural Disaster, Severe Weather, Bomb Threats, Harassment, Workplace Threats and Violence, Hostile Work Environment, Substance Abuse, and Acceptable Internet/E-mail Use in the Workplace and documenting that these policies are communicated to all employees annually and at the time of hiring.
- Determining loss control and safety training needs, including the identification, handling, storage, and disposal of hazardous materials, and developing a plan of action to guarantee required safety training is accomplished.
- Ensuring that first aid kits and personal protective equipment needs are met.
- Offering loss control and safety suggestions and promoting the entity's loss control program.
- Developing and conducting loss control and safety orientation programs for new employees.

- Reviewing compliance status with the entity's Records Management System and OMB's procurement requirements.
- Ensure adequacy of the entity's Continuation of Operations Plan (COOP).

The loss control committee should meet at least quarterly at a regular time and date, with attendance mandatory. Each meeting should have a fixed agenda that is sent to the members about one week before the meeting. Following the agenda closely will keep the meeting moving. Meetings generally should not last more than one hour. A special meeting could be held or an ad hoc committee formed to address a complicated issue.

The agenda for the meeting can be simple:

- Call to order
- Roll call by the secretary
- Introduction of any visitors, if allowed
- Reading and approval of minutes of the previous meeting
- Review of any policies issued since the last meeting
- Taking care of unfinished business
- Review of most recent Risk Management Division Quick Tips
- Review of status of Risk Management Fund and Risk Management Workers Compensation Program applications for discounts
- Review of any accidents occurring and preventive measures taken since the previous meeting
- Discussion of safety inspections and recommendations
- Addressing new business
- Adjournment

Because the minutes of the loss control committee meetings can be used to document annual compliance with the requirements for the Risk Management Fund Contribution Discount Program, the meeting minutes and tapes of the executive sessions of the meeting should be kept for one calendar year following the date of the meeting.

Loss control committee meetings are considered by North Dakota law to be open meetings and may be closed to the extent that they deal with Risk Management Fund incident reports, investigation reports, or Risk Management Fund records of a specific pending or reasonably predictable claim.

The purpose of holding an executive session is fundamental to an effective loss control program. This is the time during a loss control committee meeting that the members can discuss the entity's incidents, accidents, claims and lawsuits freely to determine the root cause of the incident or



possible trends. The discussion held during an executive session is exempt from the open records law—in other words, members cannot be questioned about the information they discuss during an executive session. This is important because the members may discover through the review such things as a trend in certain types of incidents; that an incident was caused because an employee was not trained properly; or that an incident was caused because an outdated policy was in place. This is the loss control committee's chance to get to the nitty-gritty of each incident and build awareness within the group of what incidents may be costing the State. Once all of the incidents are discussed, the executive session can be ended properly.

If it was decided in the executive session that, for example, a policy must be changed for a specific person to monitor a portion of a sidewalk and to apply ice melt when certain conditions arise, that change in policy should be discussed and documented in the reopened portion of the meeting — without referencing specific claims or incidents. Of course, members should be assigned to carry out these actions and report on the progress in future meetings. Remember that the details of the incidents discussed in executive session need to stay there – do not repeat the details (names of injured, numbers of types of claims, etc.) in the open session – that will cause that incident to become an open record. Keep the record 'general' when discussing the appropriate 'actions to be taken'. Also, remember, loss reports distributed to the loss control committee members for discussion should be collected and shredded after the meeting.

The following summary of N.D.C.C. §§ 32-12.2-11 and 12 and N.D.C.C. ch. 44-04 addresses the open records/open meetings issues affecting state entity loss control committees and subcommittees. It is not intended to address open records/open meetings issues affecting other state committees and subcommittees, nor is it intended to address political subdivisions or organizations. State employees should read applicable laws for more specific information on open records/open meetings.

The attorney assigned to represent each state entity will be able to answer any questions state employees may have concerning open records/open meetings issues.

## **Records**

**How do I determine if something is a “record”?**

*Recorded information + public entity + public business = “record.”*

- Is there “recorded information”?
  - “Recorded information” means any kind of information, regardless of the physical form or characteristic by which the information is stored, recorded, or reproduced. N.D.C.C. § 44-04-17.1(15).
  - General examples of State agency loss control committee “recorded information” include: tape, video and audio recordings; computer reports; e-mail and voice mail messages; calendars; letters; notes; and memos. Public entities should develop record retention policies on e-mail and voice mail messages.
  - Specific examples of State agency loss control committee “recorded information” include: exempt Risk Management Fund records concerning funds or liability reserves; incident reports; investigation reports; or other Risk Management Fund records of a pending or reasonably predictable claim against the State or a State employee. N.D.C.C. §§ 32-12.2-11 and 12.
- Is the recorded information in the possession or custody of a “public entity” ?
  - “Public entity” means all public or governmental bodies, boards, bureaus, commissions, or agencies of the State, including any entity created or recognized by the Constitution of North Dakota, state statute, or executive order of the governor to exercise public authority or perform a governmental function. N.D.C.C. § 44-04-17.1(12)(a).
  - N.D.C.C. § 32-12.2-12 creates or recognizes State agency loss control committees. Therefore, loss control committees are public entities.
- Has the recorded information been received or prepared for use in connection with “public business”?
  - “Public business” means all matters that relate or may foreseeably relate in any way to: the performance of the public entity’s governmental functions, including any matter over which the public entity has supervision, control,

jurisdiction, or advisory power; or the public entity's use of public funds. N.D.C.C. § 44-04-17.1(11).

- State agency loss control committee records relate to public business because they concern governmental functions and the use of public funds in that they address State personnel and State property issues.

### **What are the three classes/types of records?**

*The three classes/types of records are open, confidential, and exempt.*

- “Open record” means all or part of a record that is required by law to be open to the public. N.D.C.C. § 44-04-18.
  - “Confidential record” means all or part of a record that is either expressly declared confidential or is prohibited from being open to the public. N.D.C.C. § 44-04-17.1(3).
  - “Exempt record” means all or part of a record that is not open to the public, nor is confidential, but may be open in the discretion of the public entity having possession or custody of the record. N.D.C.C. § 44-04-17.1(5).
- All or part of an exempt record the public entity has reasonably decided not to open to the public is a “closed record.” N.D.C.C. § 44-04-17.1(2).
  - All or part of an exempt record the public entity has reasonably decided to open to the public remains an “open record.” N.D.C.C. § 44-04-17.1(5).

How do I determine if a record is open, confidential, or exempt?

*All records are open unless they are confidential by law or exempt by law and closed by the public entity.*

- Except as otherwise specifically provided by law, all records of a public entity are open records. N.D.C.C. § 44-04-18 and N.D. Const. art. XI, § 6.
- In general, if a record is an exempt record, the public entity having possession or custody of the record has the discretion to decide

whether to disclose the record. With regard to exempt Risk Management Fund records, N.D.C.C. § 32-12.2-11 gives the State Risk Manager the discretion to decide which Risk Management Fund records to disclose, even if those records are in the custody of a loss control committee or a State agency. N.D.C.C. § 44-04-17.1(5) and N.D.C.C. §§ 32-12.2-11 and 12.

Examples of laws establishing confidential or exempt records:

- State entity and loss control committee records concerning Risk Management Fund reserves, incident reports, investigation reports, or other Risk Management Fund records of a pending or reasonably predictable claim against the State or a State employee are exempt records. If a committee or entity receives a request for an exempt Risk Management Fund record, the committee must contact the Director of the Risk Management Division to determine whether the record should be disclosed. If the committee receives a request for a record other than a Risk Management Fund record, the committee should determine whether the record is open, exempt, or confidential, and disclose it if appropriate. N.D.C.C. §§ 32-12.2-11 and 12.
- Portions of State entity loss control committee records concerning a public employee's medical treatment or use of an employee assistance program are confidential, and portions concerning a public employee's personal information are exempt. N.D.C.C. § 44-04-18.1.

### **When and how must I provide access to or disclose open records?**

*Provide access to open records by allowing the public to timely inspect or receive a copy of the records.*

- A public entity may take a reasonable amount of time to consult with its attorney if there is a reasonable question whether a requested record is exempt or confidential. N.D.C.C. § 44-04-18(7).
- Allow for free inspection of open records during the public entity's regular office hours. If a public entity does not have regular office hours, the name and telephone number of a contact person authorized to provide access to the public entity's records must be posted on the door of the office of the public entity, if any. Otherwise, for state-level public entities, the information regarding

the contact person must be filed with the secretary of state. N.D.C.C. § 44-04-18(1).

- Furnish the requester with one copy of the public records requested. A request need not be made in person or in writing. The copy must be mailed upon request. The public entity may charge the requester a reasonable fee for making or mailing the copy, or both, including labor, materials, postage, and equipment, but excluding any cost associated with locating, reviewing, or providing access to the requested record, or any cost associated with deleting, excising, or otherwise withholding confidential or closed information. This subsection does not apply to copies of public records for which a different fee is specifically provided by law. N.D.C.C. § 44-04-18(2).
- Access to electronically stored records under this section, or a copy thereof, must be provided at the requester's option in either a printed document or through any other available medium. A computer file is not an available medium if no means exist to separate or prevent the disclosure of any closed or confidential information contained in that file. Except as reasonably necessary to reveal the organization of data contained in an electronically stored record, a public entity is not required to provide an electronically stored record in a different structure, format, or organization. This section does not require a public entity to provide a requester with access to a computer terminal. N.D.C.C. § 44-04-18(3).
- A public entity may provide access from an outside location to any computer database or electronically filed or stored information maintained by that entity pursuant to procedures developed by that entity. Except for access provided to another State-level public entity, the entity may charge a reasonable fee for providing that outside access. N.D.C.C. § 44-04-18(4).
- Any request under this section for records in the possession of a public entity by a party to a criminal or civil action or adverse administrative proceeding involving that entity, or by an agent of the party, must comply with applicable discovery rules and be made to the attorney representing that entity in the criminal or civil action or adverse administrative proceeding. N.D.C.C. § 44-04-18(5).
- If confidential or exempt information the public entity has closed is contained in an open record, the public entity shall disclose the record after deleting, excising, or otherwise withholding the

confidential or closed information. N.D.C.C. §§ 44-04-18.10(1) and (2).

- An officer or employee of a public entity may (but is not required to) disclose or comment on the substance of an open record. Agreements providing otherwise are void. N.D.C.C. § 44-04-18.10(3).
- Unless disclosure under a court order is specifically prohibited by law, exempt records must be disclosed pursuant to a court issued subpoena or order. N.D.C.C. § 44-04-18.11(1). However, N.D.C.C. §§ 32-12.2-11 and 12 provide certain Risk Management Fund records held by State agency loss control committees are privileged, which means the State Risk Manager has discretion to decide whether to disclose such records pursuant to a court subpoena or court order.

### **When and how must I deny access to records?**

*Access must be denied if the information is confidential by law or exempt by law and closed by the public entity and if the public entity describes the legal authority for the denial.*

- Access must be denied to entire records or portions of records that are confidential by law or exempt by law and closed by the public entity. N.D.C.C. § 44-04-18(7). The Director of the Risk Management Division has the authority to decide if exempt Risk Management Fund records can be disclosed by a State entity loss control committee.
- If all of the information in a record is confidential or closed, the public entity must deny access to the entire record. If some of the information in a record is confidential or closed, the public entity must deny access to only the confidential or closed portions of the record, but must not deny access to the other portions which are open. N.D.C.C. §§ 44-04-18.10(1) and (2).
- A denial of a request for records made under this section must describe the legal authority for the denial and must be in writing if requested. N.D.C.C. § 44-04-18(6).

### **Meetings**

#### **How do I determine if something is a “meeting”?**

***Gathering + public entity + governing body + public business = “meeting”.***

- Is there a “gathering”?
  - A formal or informal grouping, whether in person or through other means such as a telephone or video conference. N.D.C.C. § 44-04-17.1(8).
  - For example, State agency loss control committees should be comprised of several members who meet in a “gathering.”
- Is it a gathering of a “public entity” or its agents?
  - “Public entity” means public or governmental bodies, boards, bureaus, commissions, or agencies of the State, including any entity created or recognized by the Constitution of North Dakota, State statute, or executive order of the governor to exercise public authority or perform a governmental function. N.D.C.C. § 44-04-17.1(12)(a).
  - State entity loss control committees are created or recognized in N.D.C.C. §§ 32-12.2-11 and 12. Therefore, loss control committees are public entities.
- Is it a “governing body” of the public entity?
  - “Governing body” means the multi-member group or sub-group responsible for making a collective decision on behalf of a public entity. N.D.C.C. § 44-04-17.1(12)(a).
  - The governing body of a State agency loss control committee is the committee as a whole or any part of the whole committee given the authority to make decisions or act on behalf of the whole committee.
- Does the gathering regard “public business”?
  - Public business means all matters that relate or may foreseeably relate in any way to the performance of the public entity’s governmental functions, including any matter over which the public entity has supervision, control, jurisdiction,

or advisory power; or the public entity's use of public funds. N.D.C.C. § 44-04-17.1(11).

- The Risk Management matters addressed by the committee are public business.

### **What are the four classes/types of meetings?**

*The four classes/types of meetings are open, confidential, exempt, and executive sessions.*

- “Open meeting” means all or part of a meeting that is required by law to be open to the public. N.D.C.C. § 44-04-19.
  - “Confidential meeting” means all or part of a meeting that is either expressly declared confidential or is prohibited from being open to the public. N.D.C.C. § 44-04-17.1(3).
  - “Exempt meeting” means all or part of a meeting that is neither required by law to be open to the public, nor is confidential, but may be open in the discretion of the public entity holding the meeting. N.D.C.C. § 44-04-17.1(5).
  - “Executive session” means all or part of a meeting that involves consideration of confidential or closed records. N.D.C.C. § 44-04-19.2.
- All or part of an exempt meeting the public entity has reasonably decided not to open to the public is a “closed meeting” or “executive session.” N.D.C.C. §§ 44-04-17.1(2) and (4).
  - All or part of an exempt meeting the public entity has decided to open to the public remains an “open meeting.” N.D.C.C. § 44-04-17.1(5).
- How do I determine if a meeting is open, confidential, exempt, or an executive session?**

*All meetings are open unless they are confidential by law or exempt by law and closed by the public entity. Except as otherwise specifically provided by law, all meetings of a public entity must be open. N.D.C.C. § 44-04-19 and N.D. Const. art. XI, § 5.*

- Is there a specific law providing the meeting or record to be considered at the meeting is confidential or exempt? If not, the



meeting must remain open. If so, the meeting may be closed and conducted as an executive session.

- For example, all or the portions of State agency loss control committee meetings concerning Risk Management Fund reserves, incident reports, investigation reports, or other risk management fund records of a pending or reasonably predictable claim against the State or a State employee are exempt and the State Risk Manager has the authority to decide what portions to close. N.D.C.C. §§ 32-12.2-11 and 12

### **When and how must I provide notice of and schedule open meetings?**

***Provide notice and schedule in accordance with N.D.C.C. § 44-04-20.***

- Public notice must be given in advance of all meetings. The notice must contain the date, time, and location of the meeting and, where practicable, the topics to be considered. The notice must also contain the general subject matter of any executive session expected to be heard during the meeting. For meetings to be held by telephone or video conference, the location of the meeting and the place the meeting is held is the location of a speakerphone or monitor as required under section 44-04-19. The notice required in this section must be posted at the principal office of the governing body holding the meeting, if such an office exists, when the board members are notified of the meeting. The notice must also be posted at the location of the meeting on the day of the meeting. In addition, unless all of the information contained in the notice was previously filed with the secretary of state, the notice must be filed in the office of the secretary of state when the board members are notified of the meeting. For regularly scheduled meetings, the schedule of these meetings, including the aforementioned notice information, if available, must be filed annually in January with the secretary of state. Once the schedule is prepared, it must also be furnished to anyone who requests the information.
- In the event of emergency or special meetings of a governing body, the person calling such a meeting shall also notify the public entity's official newspaper, if any, and any representatives of the news media, which have requested to be so notified of such special or emergency meetings, of the time, place, date, and topics to be considered at the same time as such governing body's members are

notified. Topics that may be considered at an emergency or special meeting are limited to those included in the notice to the media.

- The governing body's presiding officer has the responsibility of assuring that such public notice is given at the same time as the governing body's members are notified.

### **How must I provide access to open meetings?**

*Provide access in accordance with N.D.C.C. § 44-04-19.*

- Make sure the meeting room is accessible to and the size of the room accommodates the number of persons reasonably expected to attend the meeting.
- Allow the public to photograph, to record on audio or video tape, and to broadcast live on radio or television the portion of the meeting that is not held in executive session, provided that there is not active interference with the conduct of the meeting. The exercise of this right may not be dependent upon the prior approval of the governing body. However, the governing body may impose reasonable limitations on recording activity to minimize the possibility of disruption of the meeting.
- Provide a speaker phone or monitor at the location specified in the notice issued under N.D.C.C. § 44-04-20 where one or more of the members of the governing body is participating by telephone or video.

## How must I conduct public meetings?

*Conduct public meetings by addressing the topics in the notice and schedule, voting, and keeping minutes.*

- Follow the meeting notice and meeting schedule. N.D.C.C. § 44-04-20.
- Unless otherwise specifically provided by law, all votes of whatever kind taken at a public meeting must be open, public votes, and all nonprocedural votes must be recorded roll call votes, with the votes of each member being made public at the open meeting. Procedural votes must be recorded at the request of any member of the governing body. N.D.C.C. § 44-04-21(1).
- Minutes must be kept of all open meetings. The minutes must include, at a minimum:
  - The names of the members attending the meeting;
  - The date and time the meeting was called to order and adjourned;
  - A list of topics discussed on public business;
  - A description of each motion made at the meeting and whether the motion was seconded;
  - The results of every vote taken at the meeting; and
  - The vote of each member on every recorded roll call vote. N.D.C.C. § 44-04-21(2).

## When and how must I deny access to meetings?

*Access must be denied if the meeting or records considered at the meeting are confidential by law or exempt by law and closed by the public entity and if an executive session is properly conducted.*

- Access must be denied to portions of meetings that are confidential or exempt and closed. N.D.C.C. § 44-04-19.2(1).
- Executive sessions (closed portion of the meeting) occur if the governing body convenes an open session and, unless a confidential

- meeting is required, passes a motion to hold an executive session. N.D.C.C. § 44-04-19.2(2).
- The governing body must announce during the open portion of the meeting the topics to be discussed or considered during the executive session and the body's legal authority for holding an executive session on those topics.
- The executive session must be recorded electronically or on audio tape or videotape.
- The topics discussed or considered during the executive session are limited to those for which an executive session is authorized by law and that have been previously announced.
- Final action concerning the topics discussed or considered during the executive session is taken at a meeting open to the public unless final action is otherwise required by law to be taken during a closed or confidential meeting. For purposes of this subsection, "final action" means a collective decision or a collective commitment or promise to make a decision on any matter, including formation of a position or policy, but does not include guidance given by members of the governing body to legal counsel or other negotiator in a closed attorney consultation or negotiation preparation session authorized in N.D.C.C. § 44-04-19.1.
- The minutes of an open meeting during which an executive session is held must indicate the names of the members attending the executive session, the date and time the executive session was called to order and adjourned, a summary of the general topics that were discussed or considered that does not disclose any closed or confidential information, and the legal authority for holding the executive session.

## **Records Management Systems**

### **The Importance of a Records Management System**

As important as determining whether a record is an open record is determining how to properly handle those records – how to manage them, retain them, or destroy them. Loss control of records is an evolving process. For example, most documents created today are not created in a paper format. They may be presented in a paper format, but the record or the information is probably created, manipulated, accessed, and stored in an electronic format. How does an agency or facility properly manage all aspects of its records?

The Records Management Division of the North Dakota Information Technology Department has developed a Records Management Program Manual that the Risk Management Division encourages all State agencies and facilities to avail themselves of. The Schedule section of that Manual will assist you in developing and maintaining an effective records management system to address your paper and electronic records. The Manual is available by calling (701) 328-3585 or on the internet at [www.state.nd.us/ITD/recordsmanagement](http://www.state.nd.us/ITD/recordsmanagement).

Proper records handling becomes especially important in the defense of a claim or lawsuit filed against the State or an employee of the State acting within the scope of employment. An effective management system can assist in:

1. Locating documents that can be used offensively and defensively in a legal proceeding.
2. Avoiding the staggering costs associated with data retrieval when the exact ion of information is unknown. It is estimated that such procedures can cost anywhere from \$2,500 for a single computer to \$100,000 to examine an entire computer system.
3. Reducing the chances of being assessed discovery sanctions. Prudential Insurance Company was sanctioned \$1 million dollars and was forced to reimburse a substantial portion of the plaintiff's attorneys' fees due to the unintentional destruction of electronic evidence because Prudential was said to have failed to preserve evident. See Prudential Ins. Co. of Am. Sales Practices Lit., 169 F.R.D. 598 (1997).

### **The application of a Records Management System in the event of an incident, claim, or a lawsuit.**

Incident – Upon learning of actual, pending, or possible litigation, audit, or investigation, an agency's or facility's records coordinator should work with management and legal counsel to issue a Destruction Hold Notice. That notice will immediately notify all state employees to cease destruction of records, including paper, microforms, or electronic information. The notice should include the following information:

- A brief description of the incident, claim, or lawsuit.
- An identification of the main business functions affected.
- A list of the types of records - regardless if it is stored on paper, microfilm, or electronic format - that may be involved.

- Notification to the employees that these records must not be altered or destroyed until further notification from management or legal counsel.

Management or legal counsel will review the action and determine which records will be required. Upon completion of the review, approval to continue normal disposal of unneeded records and files, which are not included in the action, should be provided. Records needed in the action must be retained until specific approval for disposal is provided.

## Open Records Requests

Incident – After an incident occurs, but before a lawsuit is commenced, you may receive an open records request for information. It is recommended that agencies ask people requesting information to submit their requests in writing. An Incident Report, which is the State's version of how the incident happened, must then be completed (if not already done) by the State Agency employee with the most first-hand knowledge of the incident, reviewed by the State agency risk management contact, and submitted to the Risk Management Division of OMB. (See Section 3 of this Manual.)

The incident report is *privileged* and *exempt* from disclosure under N.D.C.C. § 32-12.1-11. That means that only Risk Management has the authority to decide if it may be disclosed. *The State agency involved in the incident may not disclose the incident report to anyone but Risk Management.*

Nonetheless, State agencies should treat exempt records with caution for two reasons. First, exempt records can become open records “when disclosure of the record will not prejudice any outstanding claim or reasonably predictable claim against the state or a state employee, all civil litigation or adversarial administrative proceedings, including the exhaustion of appellate remedies, have been completed, and, in the case of reasonably predictable claims, the applicable statute of limitations has expired.” N.D.C.C. § 32-12.2-11(2). *That means that after a case is over, exempt records may need to be disclosed to the public upon request.* Second, the court may order the State to disclose exempt and even confidential records under N.D.C.C. § 44-04-18.11.

If you have any questions about a request for information, or if you feel the request is a precursor to litigation, please consult with the assistant attorney general assigned to your agency or Risk Management.

Claim – The notice of claim form is the injured party's version of how the incident occurred and is also an exempt record under N.D.C.C. § 32-12.2-

11. Risk Management has the authority to decide if it may be disclosed. *The State agency involved in the incident may not disclose the notice of claim form to anyone but Risk Management.*

Investigation – An investigation of an incident, claim, or lawsuit will be conducted by Risk Management, an attorney handling the matter, or an adjuster or investigator hired by the State. State employees should only talk with the State’s attorneys, adjusters or investigators as their documents are exempt records under N.D.C.C. § 32-12.2-11. Again, only Risk Management has the authority to decide if those records may be disclosed. *The State agency involved in the incident may not disclose the records to anyone but Risk Management.*

Lawsuit – Obviously during a lawsuit, all written or oral communication with State employees or agencies should be forwarded to the attorney handling the lawsuit. No information should be provided to anyone without specific authorization by that attorney.

An employee involved in the lawsuit must cooperate and provide complete disclosure throughout the case to qualify for representation and indemnification for the State. That employee may not refuse to provide information or to participate in process or make a significant misrepresentation of the facts. That means they must provide all relevant documents to the attorney for the State, even confidential records. For instance, if the office of Attorney General represents State Penitentiary guards in a case about the treatment of an inmate, even the inmate’s confidential medical records and the penitentiary guard’s home addresses and income tax returns may need to be supplied to the assistant attorney general handling the case. The attorney would preserve the confidentiality of the records in accordance with the law.

If the agency needs any records requested by attorneys representing the State to continue to do business, it is recommended the agency keep a copy of the records and provide the originals to the attorney because they may be needed as court exhibits.

Destruction Ramifications – What happens if an agency destroys records in compliance with a document retention policy as compared to destruction that is not in compliance with a document retention policy? Courts have awarded sanctions when documents or computer records are altered and destroyed after suit is filed or after becoming aware of a claim. Courts have also allowed plaintiff’s expert to retrieve all recoverable files, requiring the party who destroyed the records to assist in that process. (See Section 3.2-1 of this Manual for additional information on the Destruction Hold process.)

Closed Files – Some lawsuits involving the state of North Dakota are archived and not destroyed. Once the lawsuit is completed, it becomes an

open record. During the litigation process some clients request the attorney handling the matter to write down the strengths and weakness of the case. It should be remembered that this documentation eventually becomes an open record. Accordingly, if a similar incident occurs later, the attorney for the injured party may ask for any past similar cases and be able to use that review to the detriment of the State. It is best to verbally discuss such issues and to not create a paper record.



## 4.3 Facility Audit and Inspection Checklists

The ability to recognize safety and health hazards is the core of an effective loss control program. This Section of the Manual has been developed to assist you to better understand what may constitute a hazard. Extreme hazards are often obvious. However, subtle hazards are not as easily identifiable but must be effectively addressed.

One effective method for your agency to identify, detect, correct or control potential hazards is to conduct periodic health and safety audits or inspections. There are a number of factors to consider when establishing an effective audit or inspection procedure. For example, consider:

- using a team approach;
- rotating members of audit team - *new eyes see different things*;
- being thorough - *cover every nook and cranny in your facility*;
- being frequent - *the day after an audit unlabeled containers can reappear*;
- being comprehensive - *overlooking little things can create big problems*;
- utilizing inspection checklists as a reference – *initially a checklist can offer direction to the inspection team and the form will serve to document the team's findings*;
- setting up a system for corrective action after the audit.

**How to get started** - The checklists contained in this Section may first appear to be overwhelming. *It is not intended that you use the entire checklist when conducting the inspections at your facility. You should pick and choose those lists that specifically apply to the areas you will be inspecting.* However, it may be useful for the agency loss control committee or the inspection team to review the checklists grouped under the **General** heading. The information contained in those lists is generic and applies more to policies and procedures than to specific exposures.

**Developing a Checklist** - When the team is ready to begin the inspection process they should first determine the area they will be inspecting. For example, if they choose to begin in the administrative offices, copy the “Building Inspection – Interior” portion of the checklist. Add or delete portions or items that do not apply your operations. If they are inspecting a maintenance area, they may need to use a number of lists under *Equipment Inspections* as well as some under *Facility Inspections*. As you

develop your inspection process you will learn to adapt the lists to meet your needs. In order to easily format a checklist for the team's use, download the entire checklist (or any portion thereof) from the Manual on our Internet Web Page. You can access the Manual at <http://www.state.nd.us/risk/>. The index is programmed so that you may select the section you wish, point to the page number and click your mouse key. That page will then appear for your review. Highlight and print the portion you wish to copy.

Unfortunately, this checklist is not all-inclusive. It was our intention to address exposures that are common to a number of agencies. If your facility has an exposure that is not addressed, or if you need clarification of any of the information contained in this Section's checklist, please contact our office so that we may assist you.

**Using the Checklist** - The following is an example of how to develop and use a checklist for documentation of inspections. You will note that the form has a column titled "Corrective Action and Completion Date". Questions answered "No" require follow-up. Once a deficiency has been identified in an inspection, it is important to follow-up and document the action taken to correct the deficiency, the date the corrective action was taken, and the person that took the corrective action.

**(i.e. Facility) Inspection Form**

Agency/Department:

Inspection Date:

Building:

Inspector:

Room Number:

Phone:

Y   N   N  
A  
Y = Satisfactory  
N = Needs Improvement  
NA = Not Applicable

**Comments**

**Corrective  
Action And  
Completion  
Date**

**Housekeeping**

Y		1. Is the work area clean & orderly?	Broken faceplate on receptacle on break-room west wall. Replace.  Extension cord running from the pop machine into outlet. Relocate machine or have it rewired so it will be plugged directly into outlet. Monitor cord placement so it will not work its way under the machine possibly wearing through the cord causing it to short out on the chassis.  Boiler room unlocked. Lock to prevent unauthorized personnel from entering.	Faceplate replaced 10/14/04 by XX.
Y		2. Have all unnecessary items been removed?		
Y		3. Are floors clean, dry & not slippery?		
Y		4. Are spills mopped up in a timely manner?		
	N	5. Is someone designated to monitor removal of slip, trip & fall hazards (slippery rugs, upturned rug edges, frayed carpet, loose cords, melting ice & snow?	5. Rug at the west entrance had upturned edges-trip or fall hazard. Routinely replace with clean rug by rug service company.	
Y		6. Are aisles & passageways clearly marked?		
Y		7. Is trash removed from the building daily?		
	N	8. Is storage restricted to designated areas?	8. There are files stored in front of electrical panels that need to be moved, a three-foot clearance around all electrical panels is	

				required.	
Y			9. Is storage neatly arranged?		
			<Insert Category>		
			< Insert Customized Checklist>		
			<Insert Category>		
			< Insert Customized Checklist>		

## CHECKLIST INDEX

*The following checklists are by no means all-inclusive. You should review them in preparation for an inspection. They are meant to create an awareness, not channelize your focus.*

*Checklists provide a quick reference to help you prevent and reduce loss. It should be used as a guide for developing, not a substitute for, a comprehensive risk management program.*

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# ***SELF-INSPECTION CHECK LISTS***

## **GENERAL INSPECTIONS**

### **Accident Investigation**

Have accident investigation guidelines/procedures been established?

Are responsibilities assigned for all phases of investigation process?

Who is responsible?

Who completes the records/logs?

Are Risk Management forms used?

Who completes the accident investigation report?

Who ensures corrective actions are implemented and effective?

Are all accidents and near misses investigated?

Are accident investigation recommendations/corrective actions implemented?

Are personnel involved in investigation process trained in investigation techniques and procedures?

Is the accident prevention plan reviewed at least annually?

Are results documented and shared with management/supervisors/employees?

### **Audit/Inspection**

1. Are there regularly scheduled and conducted inspections  
of facilities?  
work-site stations?  
vehicles?  
equipment and tools?  
personal protective equipment?
2. Are inspection checklists utilized?
3. Have procedures been established to ensure inspection deficiencies are  
  
corrected?

### **Bloodborne Pathogens**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.1030. It applies to work activities that may result

in exposure to blood or other potentially infectious materials. Such activities might include students learning how to take blood tests or teachers who are trained in first aid and are required to render first aid in case of emergency. This checklist does not cover acts that result in exposure to blood or other potentially infectious materials when someone voluntarily helps others in an emergency. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a non-regulatory recommendation.

### ***Exposure Control Plan***

Has a written exposure control plan been developed? [29 CFR 1910.1030(c)(1)(i), (c)(1)(ii), and (c)(2)]

***Note:** The exposure control plan must include (a) a list of tasks identified as having a potential for exposure to bloodborne pathogens; (b) methods to protect students and employees; (c) dates and procedures for providing hepatitis B vaccinations; (d) procedures for post-exposure evaluation and follow-up in case of exposure; (e) content and methods for training students and employees; and (f) procedures for maintaining records.*

Is the written exposure control plan updated yearly? [29 CFR 1910.1030(c)(1)(iv)]

### ***Engineering and Work Practice Controls***

Do students and employees follow universal precautions to prevent contact with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(1)]

Are engineering and work practice controls implemented before personal protective equipment is used? [29 CFR 1910.1030(d)(2)(i)]

Are engineering controls examined and maintained on a regular schedule to ensure their effectiveness? [29 CFR 1910.1030(d)(2)(ii)]

Are hand washing facilities readily accessible? [29 CFR 1910.1030(d)(2)(iii),(iv)]

***Note:** If providing hand washing facilities is not possible, an appropriate antiseptic hand cleanser and clean cloth, paper towels, or antiseptic towelettes may be substituted. When antiseptic hand cleansers or towelettes are used, wash hands with soap and running water as soon as possible.*

Do students and employees wash their hands immediately after removing gloves or other personal protective equipment? [29 CFR 1910.1030(d)(2)(v)]

Do students and employees wash or flush hands or other skin areas with soap and water after contact with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(2)(vi)]



Is it prohibited to bend, recap, or remove contaminated needles or sharps except as noted below? [29 CFR 1910.1030(d) (2) (vii)]

**Note:** *NIOSH recommends avoiding needle recapping.*

**Note:** *When no feasible alternatives are available, OSHA permits recapping or needle removal only through the use of a mechanical device or a one-handed technique. Such procedures could involve the one-handed "scoop" technique: using the needle itself to pick up the cap, and pushing cap and sharp together against a hard surface to ensure a tight fit. Or, the sharp might also be recapped by holding the cap with tongs or forceps to place it on the needle.*

Can it be assured that the shearing and breaking of contaminated needles does not occur? [29 CFR 1910.1030(d)(2)(vii)]

Is it prohibited to eat, drink, smoke, apply cosmetics, and handle contact lenses in work areas where the potential exists for exposure to bloodborne pathogens? [29 CFR 1910.1030(d)(2)(ix)]

Are food and drink prohibited in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops where blood or other potentially infectious materials are present? [29 CFR 1910.1030(d)(2)(x)]

Are tasks involving blood or other potentially infectious materials performed in a way that minimizes splashing and generating droplets of these substances? [29 CFR 1910.1030(d)(2)(xi)]

Is mouth pipetting and suctioning of blood or other potentially infectious agents prohibited? [29 CFR 1910.1030(d)(2)(xii)]

Are specimens of blood or other potentially infectious materials placed in an appropriate container that prevents leakage during collection, handling, processing, storage, or transport? [29 CFR 1910.1030(d)(2)(xiii)]

### ***Personal Protective Equipment***

Is personal protective equipment such as gloves, gowns, laboratory coats, face shields or masks, and eye protection provided free to persons potentially exposed to bloodborne pathogens? [29 CFR 1910.1030(d)(3)(i)]

Is personal protective equipment of appropriate sizes readily accessible or issued to all students and employees? [29 CFR 1910.1030(d)(3)(iii)]

Are hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives readily accessible to those who are allergic to the gloves normally provided? [29 CFR 1910.1030(d)(3)(iii)]

Is personal protective equipment repaired or replaced to maintain its effectiveness? [29 CFR 1910.1030(d)(3)(v)]

Do students and employees immediately remove garments that have been penetrated by blood or other potentially infectious materials? [29 CFR 1910.1030(d)(3)(vi)]

Do students and employees remove all personal protective equipment before leaving the work area? [29 CFR 1910.1030(d)(3)(vii)]

Do students and employees use an appropriately designated area or container for storage, washing, decontamination, or disposal of personal protective equipment? [29 CFR 1910.1030(d)(3)(viii)]

Do students and employees wear gloves whenever the possibility exists of hand contact with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(3)(ix)]

***Note:** This includes touching contaminated items or surfaces and persons receiving phlebotomy training.*

Are disposable (single-use) gloves replaced as soon as they are contaminated, torn, punctured or cannot function as a barrier? [29 CFR 1910.1030(d)(3)(ix)(A)]

Is it prohibited to re-use disposable (single-use) gloves? [29 CFR 1910.1030(d)(3)(ix)(B)]

Are utility gloves decontaminated and re-used only if the integrity of the glove is not compromised? [29 CFR 1910.1030(d)(3)(ix)(C)]

Do students and employees wear masks and eye protection devices (such as goggles or glasses with solid side shields or chin-length face shields) whenever splashes or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated? [29 CFR 1910.1030(d)(3)(x)]

Are gowns, aprons, lab coats, clinic jackets, or similar outer garments worn whenever exposure to blood or other potentially infectious materials is anticipated? [29 CFR 1910.1030(d)(3)(xi)]

Is there a written method of decontamination and schedule for cleaning of all areas and surfaces that may become contaminated with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(4)(i)]

Are all equipment and working surfaces cleaned and decontaminated immediately, or as soon as feasible, after contact with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(4)(ii)]

Are protective covers used to cover equipment and surfaces removed and replaced as soon as feasible when they become overtly contaminated? [29 CFR 1910.1030(d)(4)(ii)(B)]

***Note:** Examples of protective coverings include: plastic wrap, aluminum foil, or absorbent paper backed with impervious material.*

Are all reusable receptacles such as bins, pails and cans that are likely to become contaminated with blood or other potentially infectious materials inspected and decontaminated on a regular schedule? [29 CFR 1910.1030(d)(4)(ii)(C)]

Are all reusable receptacles such as bins, pails and cans that are likely to become contaminated with blood or other potentially infectious materials cleaned and decontaminated immediately, or as soon as feasible, upon visible contamination? [29 CFR 1910.1030(d)(4)(ii)(C)]

Is picking up broken contaminated glassware with your hands prohibited? [29 CFR 1910.1030(d)(4)(ii)(D)]

Is broken contaminated glassware always cleaned up with mechanical means such as a brush and dust pan, tongs, or forceps? [29 CFR 1910.1030(d)(4)(ii)(D)]

Are contaminated sharps discarded immediately or as soon as feasible into containers? [29 CFR 1910.1030(d)(4)(iii)(A)(1)]

Are containers used for sharps disposal closable, puncture resistant, leak proof on sides and bottom, and labeled with a biohazard warning label or colored red? [29 CFR 1910.1030(d)(4)(iii)(A)(1)]

Are containers used for sharps disposal easily accessible and located in the area where sharps are used or can be reasonably anticipated to be found? [29 CFR 1910.1030(d)(4)(iii)(A)(2)]

Are containers used for sharps disposal maintained upright throughout use? [29 CFR 1910.1030(d)(4)(iii)(A)(2)(i)]

Are containers used for sharps disposal replaced routinely and not allowed to overfill? [29 CFR 1910.1030(d)(4)(iii)(A)(2)(ii)]

Are sharps containers closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping? [29 CFR 1910.1030(d)(4)(iii)(A)(3)(i)]

Are sharps containers placed in an appropriate secondary container if leakage is possible? [29 CFR 1910.1030(d)(4)(iii)(A)(3)(ii)]

Are reusable sharps that are contaminated with blood or other potentially infectious materials not stored or processed in a manner that requires a person to reach by hand into the containers where these sharps have been placed? [29 CFR 1910.1030(d)(4)(ii)(E)]

Are reusable containers not opened, emptied, or cleaned manually or in any other manner which might expose a person to the risk of skin puncture? [29 CFR 1910.1030(d)(4)(iii)(A)(4)]

Is regulated waste, other than sharps, placed into containers which are: [29 CFR 1910.1030(d)(4)(iii)(B)(1)]

closable?

constructed to contain all contents and prevent leakage of fluid during handling, storage, transport or shipping?

labeled with a biohazard warning label or colored red?

closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping?

Are containers of regulated waste, other than sharps, that have become contaminated on the outside placed into appropriate secondary containers as defined in (17) above? [29 CFR 1910.1030(d)(4)(iii)(B)(2)]

Is contaminated laundry handled as little as possible with a minimum of agitation or movement? [29 CFR 1910.1030(d)(4)(iv)(A)]

Is contaminated laundry bagged or put into other containers at the location it is used? [29 CFR 1910.1030(d)(4)(iv)(A)(1)]

Is contaminated laundry placed and transported in bags or containers labeled with the biohazard symbol or colored red? [29 CFR 1910.1030(d)(4)(iv)(A)(2)]

Is wet contaminated laundry placed and transported in bags or containers that will prevent soak-through and/or leakage of fluids to the exterior? [29 CFR 1910.1030(d)(4)(iv)(A)(3)]

Do persons who handle contaminated laundry wear protective gloves and other appropriate personal protective equipment? [29 CFR 1910.1030(d)(4)(iv)(B)]

Are garments which have been penetrated by blood or other potentially infectious materials removed immediately or as soon as possible by the user? [29 CFR 1910.1030(d)(3)(vi)]

Is the hepatitis B vaccination series made available to all persons who are reasonably anticipated to come in contact with blood or other potentially infectious materials through the performance of their job duties? [29 CFR 1910.1030(f)(1)]

Is the hepatitis B vaccination series made available to persons who have received the required bloodborne pathogen training? [29 CFR 1910.1030(f)(2)]

Within 10 days of initial assignment, is the hepatitis B vaccination series made available to persons whose job is reasonably anticipated to have contact with blood or other potentially infectious materials? [29 CFR 1910.1030(f)(2)(i)]

Have persons who refused to take the hepatitis B vaccination series signed a statement to that effect following the form prescribed by the OSHA standard? [29 CFR 1910.1030(f)(2)(iv)]

Is a confidential medical evaluation and follow-up made available to an exposed person following a report of an exposure incident? [29 CFR 1910.1030(f)(3) and (5)]

***Note:** The medical evaluation and follow-up must include documentation of the route(s) of exposure and the circumstances under which the exposure incident occurred; identification and documentation of the source individual unless identification is infeasible or prohibited by state law; the HBV or HIV infectivity of the source individual if it can be legally determined; collection and testing of blood from the exposed individual for HBV and HIV serological status provided consent is given; post-exposure prophylaxis when medically indicated; counseling; evaluation of reported illnesses; and a written opinion from a healthcare professional.*

Are containers of regulated waste labeled with a biohazard warning label? [29 CFR 1910.1030(g)(1)(i)]

***Note:** Red bags or red containers may be substituted for a biohazard warning label. Containers include refrigerators and freezers containing blood or other potentially infectious materials, and other containers used to store, transport or ship blood or other potentially infectious materials.*

Are individuals who are reasonably anticipated to have contact with blood or other potentially infectious materials in the course of their work or student activities provided training on bloodborne pathogens? [29 CFR 1910.1030(g)(2)]

***Note:** The training must include an accessible copy of the OSHA standard; a general explanation of the epidemiology and symptoms of bloodborne diseases; an explanation of the modes of transmission of bloodborne pathogens; an explanation of the exposure control plan and how to obtain a copy; an explanation of how to recognize tasks and other activities that may involve exposure to blood and other potentially infectious materials; an explanation of engineering controls, work practice controls and personal protective equipment; information on hepatitis B vaccine; emergency information and procedures; information on the post-exposure evaluation and follow-up; information on labels and color coding; and an opportunity for interactive questions and answers.*

Is bloodborne pathogen training provided before or at the time of initial assignment where contact with blood or other potentially infectious materials is possible? [29 CFR 1910.1030(g)(2)(ii)(A)]

Is bloodborne pathogen refresher training provided at least annually? [29 CFR 1910.1030(g)(2)(ii)(C)]

Is additional bloodborne pathogen training provided when changes are instituted that might affect exposure such as modification of tasks or procedures or adoption of new tasks or procedures? [29 CFR 1910.1030(g)(2)(v)]

Is the bloodborne pathogen training material appropriate in content and vocabulary to the educational level, literacy, and language of people to be trained? [29 CFR 1910.1030(g)(2)(vi)]

Is the person(s) who conducts the bloodborne pathogen training knowledgeable in the subject matter? [29 CFR 1910.1030(g)(2)(viii)]

Are accurate medical records maintained regarding hepatitis B vaccinations, examinations, medical testing, follow-up procedures, and copies of written opinions given in response to exposure incidents? [29 CFR 1910.1030(h)(1)]

***Note: These records are confidential.***

Are records maintained of training that shows the dates of the training sessions, the contents of the training session, the names and qualifications of person conducting the training, and the names of the persons attending the training sessions? [29 CFR 1910.1030(h)(2)(i)]

Are training records maintained for at least 3 years? [29 CFR 1910.1030(h)(2)(ii)]

### ***Definitions:***

**Bloodborne pathogens:** pathogenic microorganisms that are present in human blood and cause disease in humans. These pathogens include hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

**Engineering controls:** controls that isolate or remove the bloodborne pathogens hazard from the workplace (e.g., sharps disposal containers, self-sheathing needles).

**Potentially infectious materials:** include (a) the following human body fluids: blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, and saliva in dental procedures; (b) any body fluid that is visibly contaminated with blood; (c) body fluids in situations in which it is difficult to differentiate between body fluids; (d) any unfixed tissue or organ (other than intact skin) from a human (living or dead); (e) HIV-containing cell or tissue cultures and organ cultures; (f) HIV- or HBV-containing culture medium or other solutions; and (g) blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Universal precautions:** an approach to infection control whereby all human blood and certain human body fluids are treated as if they were infectious for HIV, HBV, and other bloodborne pathogens.

**Work practice controls:** controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

## Emergency Action Plan

### General Issues

Does the plan consider all potential natural or man-made emergencies that could disrupt your workplace?

*Common sources of emergencies identified in emergency action plans include - fires, explosions, floods, hurricanes, tornadoes, toxic material releases, radiological and biological accidents, civil disturbances and workplace violence.*

1. Does the plan consider all potential internal sources of emergencies that could disrupt your workplace?

*Conduct a hazard assessment of the workplace to identify any physical or chemical hazards that may exist and could cause an emergency.*

2. Does the plan consider the impact of these internal and external emergencies on the workplace's operations and is the response tailored to the workplace?

*Brainstorm worst case scenarios asking yourself what you would do and what would be the likely impact on your operation and devise appropriate responses.*

3. Does the plan contain a list of key personnel with contact information as well as contact information for local emergency responders, agencies and contractors?

*Keep your list of key contacts current and make provisions for an emergency communications system such as a cellular phone, a portable radio unit, or other means so that contact with local law enforcement, the fire department, and others can be swift.*

4. Does the plan contain the names, titles, departments, and telephone numbers of individuals to contact for additional information or an explanation of duties and responsibilities under the plan?

*List names and contact information for individuals responsible for implementation of the plan.*

5. Does the plan address how rescue operations will be performed?

*Unless you are a large employer handling hazardous materials and processes or have employees regularly working in hazardous situations, you will probably choose to rely on local public resources, such as the fire department, who are trained, equipped, and certified to conduct rescues. Make sure any external department or agency identified in your plan is prepared to respond as outlined in your plan. Untrained individuals may endanger themselves and those they are trying to rescue.*

6. Does the plan address how medical assistance will be provided?

*Most small employers do not have a formal internal medical program and make arrangements with medical clinics or facilities close by to handle emergency cases and provide medical and first-aid services to their employees. If an infirmary, clinic, or hospital is not close to your workplace, ensure that onsite person(s) have adequate training in first aid. The American Red Cross, some insurance providers, local safety councils, fire departments, or other resources may be able to provide this training. Treatment of a serious injury should begin within 3 to 4 minutes of the accident. Consult with a physician to order appropriate first-aid supplies for emergencies. Establish a relationship with a local ambulance service so transportation is readily available for emergencies.*

7. Does the plan identify how or where personal information on employees can be obtained in an emergency?

*In the event of an emergency, it could be important to have ready access to important personal information about your employees. This includes their home telephone numbers, the names and telephone numbers of their next of kin, and medical information.*

### **Evacuation Policy and Procedure**

8. Does the plan identify the conditions under which an evacuation would be necessary?

*The plan should identify the different types of situations that will require an evacuation of the workplace. This might include a fire, earthquake, or chemical spill. The extent of evacuation may be different for different types of hazards.*

9. Does the plan identify a clear chain of command and designate a person authorized to order an evacuation or shutdown of operations?

*It is common practice to select a responsible individual to lead and coordinate your emergency plan and evacuation. It is critical that employees know who the coordinator is and understand that this person has the authority to make decisions during emergencies. The coordinator should be responsible for assessing the situation to determine whether an emergency exists requiring activation of the emergency procedures, overseeing emergency procedures, notifying and coordinating with outside emergency services, and directing shutdown of utilities or plant operations if necessary.*

10. Does the plan address the types of actions expected of different employees for the various types of potential emergencies?

*The plan may specify different actions for employees depending on the emergency. For example, employers may want to have employees assemble in*



*one area of the workplace if it is threatened by a tornado or earthquake but evacuate to an exterior location during a fire.*

11. Does the plan designate who, if anyone, will stay to shut down critical operations during an evacuation?

*You may want to include in your plan locations where utilities (such as electrical and gas utilities) can be shut down for all or part of the facility. All individuals remaining behind to shut down critical systems or utilities must be capable of recognizing when to abandon the operation or task and evacuate themselves.*

12. Does the plan outline specific evacuation routes and exits and are these posted in the workplace where they are easily accessible to all employees?

*Most employers create maps from floor diagrams with arrows that designate the exit route assignments. These maps should include locations of exits, assembly points and equipment (such as fire extinguishers, first aid kits, and spill kits) that may be needed in an emergency. Exit routes should be clearly marked and well lit, wide enough to accommodate the number of evacuating personnel, unobstructed and clear of debris at all times, and unlikely to expose evacuating personnel to additional hazards.*

13. Does the plan address procedures for assisting people during evacuations, particularly those with disabilities or who do not speak English?

*Many employers designate individuals as evacuation wardens to help move employees from danger to safe areas during an emergency. Generally, one warden for every 20 employees should be adequate, and the appropriate number of wardens should be available at all times during working hours. Wardens may be responsible for checking offices and bathrooms before being the last person to exit an area as well as ensuring that fire doors are closed when exiting. Employees designated to assist in emergency evacuation procedures should be trained in the complete workplace layout and various alternative escape routes. Employees designated to assist in emergencies should be made aware of employees with special needs (who may require extra assistance during an evacuation), how to use the buddy system, and any hazardous areas to avoid during an emergency evacuation.*

14. Does the plan identify one or more assembly areas (as necessary for different types of emergencies) where employees will gather and a method for accounting for all employees?

*Accounting for all employees following an evacuation is critical. Confusion in the assembly areas can lead to delays in rescuing anyone trapped in the building, or unnecessary and dangerous search-and-rescue operations. To ensure the fastest, most accurate accounting of your employees, consider taking a head count after the evacuation. The names and last known locations of anyone not accounted for should be passed on to the official in charge.*

15. Does the plan address how visitors will be assisted in evacuation and accounted for?

*Some employers have all visitors and contractors sign in when entering the workplace. The hosts and/or area wardens, if established, are often tasked with assisting these individuals evacuate safely.*

### **Reporting Emergencies and Alerting Employees in an Emergency**

16. Does the plan identify a preferred method for reporting fires and other emergencies?

*Dialing 911 is a common method for reporting emergencies if external responders are utilized. Internal numbers may be used. Internal numbers are sometimes connected to intercom systems so that coded announcements may be made. In some cases employees are requested to activate manual pull stations or other alarm systems.*

17. Does the plan describe the method to be used to alert employees, including disabled workers, to evacuate or take other action?

*Make sure alarms are distinctive and recognized by all employees as a signal to evacuate the work area or perform other actions identified in your plan. Sequences of horn blows or different types of alarms (bells, horns, etc.) can be used to signal different responses or actions from employees. Consider making available an emergency communications system, such as a public address system, for broadcasting emergency information to employees. Ideally alarms will be able to be heard, seen, or otherwise perceived by everyone in the workplace including those that may be blind or deaf. Otherwise floor wardens or others must be tasked with ensuring all employees are notified. You might want to consider providing an auxiliary power supply in the event of an electrical failure.*

### **Employee Training and Drills**

18. Does the plan identify how and when employees will be trained so that they understand the types of emergencies that may occur, their responsibilities and actions as outlined in the plan?

*Training should be offered employees when you develop your initial plan and when new employees are hired. Employees should be retrained when your plan changes due to a change in the layout or design of the facility, when new equipment, hazardous materials, or processes are introduced that affect evacuation routes, or when new types of hazards are introduced that require special actions. General training for your employees should address the following:*

- *Individual roles and responsibilities;*
- *Threats, hazards, and protective actions;*
- *Notification, warning, and communications procedures;*

- *Emergency response procedures;*
- *Evacuation, shelter, and accountability procedures;*
- *Location and use of common emergency equipment; and*
- *Emergency shutdown procedures.*

*You may also need to provide additional training to your employees (i.e. first-aid procedures, portable fire extinguisher use, etc.) depending on the responsibilities allocated employees in your plan.*

19. Does the plan address how and when retraining will be conducted?

*If training is not reinforced it will be forgotten. Consider retaining employees annually.*

20. Does the plan address if and how often drills will be conducted?

*Once you have reviewed your emergency action plan with your employees and everyone has had the proper training, it is a good idea to hold practice drills as often as necessary to keep employees prepared. Include outside resources such as fire and police departments when possible. After each drill, gather management and employees to evaluate the effectiveness of the drill. Identify the strengths and weaknesses of your plan and work to improve it.*

#### **Employer Posting**

Is the required Workers Compensation workplace poster displayed in a prominent location where all employees are likely to see it?

Are emergency telephone numbers posted where they can be readily found in case of an emergency?

Where employees may be exposed to any toxic substances or harmful physical agents, has appropriate information concerning employee access to their personal medical and exposure records made readily available to affected employees? (it should be noted that this information must remain confidential and be kept separate from personnel records), Material Safety Data Sheets” (MSDS) (See Hazardous Substances Communication Section.)

Are signs concerning “Exiting from buildings,” room capacities, floor loading, exposures to X-ray, microwave, or other harmful radiation or substances posted where appropriate?

#### **Environmental Controls**



Questions marked with this symbol may require the help of an outside expert.

Are all work areas properly illuminated?

Are employees instructed in proper first aid and other emergency procedures?

Are hazardous substances identified which may cause harm by inhalation, ingestion, skin absorption or contact?

Are employees instructed with established guidelines concerning hazards involved with the various chemicals they may be exposed to in their work environment, such as ammonia, chlorine, epoxies, caustics, etc.?

Has the training been documented?



Is employee exposure to chemicals in the workplace kept within acceptable levels?

Can a less harmful method or product be used?



Is the work area's ventilation system appropriate for the work being performed?

Are spraying operations done in approved spray rooms or approved booths equipped with an appropriate exhaust system?

Is employee exposure to welding fumes controlled by ventilation, use of respirators, exposure time or other means?

Are welders and other workers nearby provided with flash shields during welding operations?



If forklifts and other vehicles are used in buildings or other enclosed areas, are the carbon monoxide levels monitored with use of proper equipment i.e. color metric tube, etc. and maintained below maximum acceptable concentration?



Has there been a determination that noise levels in the facilities are within acceptable levels?



Are steps being taken to use engineering controls to reduce excessive noise levels?

Are proper precautions being taken by AUTHORIZED PERSONNEL ONLY when handling asbestos and other fibrous materials (only by certified contractors)?

Are caution labels and signs used to warn of asbestos?

Are wet methods used, when practicable, to prevent the emission of airborne asbestos fibers, silica dust and similar hazardous materials?

Is vacuuming with appropriate equipment used whenever possible rather than blowing or sweeping dust?

Are grinders, saws, and other machines that produce respirable dust vented to an industrial collector or central exhaust system?

Are local exhaust ventilation systems designed and operating properly such as airflow and volume necessary for the application, ducts not plugged or belts slipping?

Is personal protective equipment provided, used and maintained whenever required?

Are there written standard operating procedures for the selection, use, and care of respirators where needed?

Are restrooms and washrooms kept clean and sanitary?

Is all water provided for drinking, washing, and cooking potable?

Are all outlets for water not suitable for drinking clearly identified?

Are employees' physical capabilities assessed before being assigned to jobs requiring heavy works?

Are employees instructed in the proper manner of lifting heavy objects?

Where heat is a problem, have all fixed work areas been provided with administrative control (exposure times, break time, etc.), spot cooling or air conditioning?

Are employees screened before assignment to areas of high heat to determine if their health condition might make them more susceptible to having an adverse reaction?

Are employees working on the streets or roadways where they are exposed the hazards of traffic, required to wear bright colored (traffic orange) warning vests?

Are exhaust stacks and air intakes so located that contaminated air will not be re-circulated within a building or other enclosed area?

#### **Fire Extinguishers (Portable)**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.157. It applies to the placement, use, maintenance, and testing of portable fire extinguishers. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

This checklist does not address detailed regulations covering the methods used for hydrostatic testing of fire extinguishers. Please consult 29 CFR 1910.157 for additional information.

#### ***General Requirements***

Are all portable fire extinguishers approved? [29 CFR 1910.157(c)(2)]

Have all the following portable fire extinguishers been removed from service? [29 CFR 1910.157(c)(5)]

Soldered or riveted shell self-generating soda acid.

Self-generating foam

Gas cartridge water

**Note:** *These types of fire extinguishers are operated by inverting the extinguisher to rupture the cartridge or to initiate an uncontrollable pressure-generating chemical reaction to expel the agent.*

Are portable fire extinguishers mounted, located, and identified so that they are readily accessible? [29 CFR 1910.157(c)(1)]

Are portable fire extinguishers fully charged, operable, and kept in their designated places at all times? [29 CFR 1910.157(c)(4)]

If fire extinguishers are enclosed in cabinets, is access to the cabinet unobstructed and is the cabinet clearly visible? [recommended]

If fire extinguishers are enclosed in cabinets with opaque doors, are doors unlocked, and are the cabinet contents indicated on the outside? [recommended]

When fire extinguishers are enclosed in locked cabinets and doors are equipped with approved visual identification clear glass panels, are glass panes easily broken? Is the door capable of being opened when the glass panel is broken? Is the unlocking handle painted red? Is the direction the handle must be pushed or pulled to open the door indicated? Is the door labeled Fire equipment: in case of fire, break glass and operate red handle? [recommended]

When fire extinguishers are enclosed in locked cabinets and doors are completely glass, are doors labeled In case of fire, break glass? [recommended]

Are extinguishers installed on the hangers or on the supplied brackets, mounted in cabinets, or set on shelves unless the extinguishers are of the wheeled type? [recommended]

Are extinguishers installed where they are subject to physical damage protected from impact? [recommended]

### ***Training and Education***

When employees are expected to use fire extinguishers, have they been trained in the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting? [29 CFR 1910.157(g)(1)]

Is this training given at the time of initial assignment and annually thereafter? [29 CFR 1910.157(g)(2)]

### ***Selection and Distribution***

Is at least one fire extinguisher available in each laboratory, shop, or other career-technical room, and one fire extinguisher available for each 2,500 square feet of floor area? [recommended]

According to the table that follows, are portable fire extinguishers selected and distributed based on the classes (see class definitions at end of checklist) of anticipated fires and on the size and degree of hazard that would affect their use? [29 CFR 1910.157(d)(1)]

First Hazard Class	Maximum Permitted Distance to Portable Fire Extinguisher
A	75 feet <sup>1</sup>
B	50 feet <sup>2</sup>
C	50-75 feet <sup>3</sup>
D	75 feet <sup>4</sup>

<sup>1</sup> Uniformly spaced standpipe systems or hose stations connected to a sprinkler system installed for

emergency use may be used instead of Class A portable fire extinguishers.

<sup>2</sup> Depending on size of extinguisher and size of fire hazard, a maximum 30 feet travel distance may be required.

<sup>3</sup> Use existing Class A or Class B hazards to determine the required pattern.

<sup>4</sup> Required where combustible metal powders, flakes, shavings or similarly sized products are generated at least once every two weeks.

### ***Inspection, Maintenance, and Testing***

Are portable fire extinguishers inspected monthly? [29 CFR 1910.157(e)(2)]

Are portable fire extinguishers subjected to an annual maintenance check? [29 CFR 1910.157(e)(3)]

Does each extinguisher have a tag or label securely attached that indicates the month and year the inspection, maintenance, states that recharging was performed and identifies the person performing the service? [recommended]

Are records of the annual maintenance check kept and retained for at least a year? [29 CFR 1910.157(e)(3)]

When portable fire extinguishers are removed for service, are standby or spare units temporarily installed of the same type and capacity? [29 CFR 1910.157(e)(5)]

Are stored pressure dry chemical extinguishers that require a 12-year hydrostatic test emptied and subjected to applicable maintenance procedures every 6 years? [29 CFR 1910.157(e)(4)]

**Note:** Dry chemical extinguishers with non-refillable disposable containers are exempt from this requirement.

### ***Hydrostatic Testing***

Are extinguishers hydrostatically tested at the intervals listed in the table below? [29 CFR 1910.157(f)(2)]

Type of Extinguishers	Test Interval (years)
Stored pressure water and/or antifreeze	5
Wetting agent	5
Aqueous film forming agent (AFFF)	5
Dry chemical with stainless steel	5
Carbon dioxide	5
Dry chemical, stored pressure, with mild steel, brazed brass or aluminum shells	12
Halon 1211	12
Halon 1301	12
Dry powder, cartridge or cylinder operated with mild steel shells	12

Is hydrostatic testing performed by trained persons with suitable testing equipment and facilities? [29 CFR 1910.157(f)(1)]

Are hydrostatic testing certification records maintained that show the date of the test, the signature of the person who performed the test, and the serial number (or other identifier) of the fire extinguisher that was tested? [29 CFR 1910.157(f)(16)]

### ***Definitions:***

**Class A fire:** a fire involving ordinary combustible materials such as paper, wood, cloth, and some rubber and plastic materials.

**Class B fire:** a fire involving flammable or combustible liquids, flammable gases, greases and similar materials, and some rubber and plastic materials.

**Class C fire:** a fire involving energized electrical equipment where safety requires the use of electrically nonconductive extinguishing media.

**Class D fire:** a fire involving combustible metals such as aluminum, magnesium, titanium, zirconium, sodium, lithium, and potassium.

**Incipient stage fire:** a fire that is in the initial or beginning stage and can be controlled or extinguished by portable fire extinguishers, Class II standpipe or small hose systems without the need for protective clothing or breathing apparatus.

### **Fire Requirements (General)**

**Guidelines:** This checklist covers regulations from the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), general industry standards 29 CFR 1910.36, 1910.38, and 1910.159. The regulations cited apply only to private employers and their employees, unless adopted by a State agency



and applied to other groups such as public employees. Recommendations from the National Fire Protection Association (NFPA) standards have also been included.

Are exit facilities inspected daily to make sure that all stairways, doors, and other exits are in proper working condition? [NFPA 1]

Are all exit paths free and unobstructed? [29 CFR 1910.36(b)(4)]

***Note:** Exit doors must not be locked, barred, or blocked in such a way as to prevent exit from the building.*

Are wedges or devices holding exit doors open prohibited? [NFPA 101]

Are all fire escapes, stairs, passageways, doors, and windows free of obstructions that would interfere with the evacuation of the building or the operation of the fire department? [29 CFR 1910.36(d)(1)]

Are all fire doors tight fitting and in good operational condition? [NFPA 80]

Are openings in the walls, floors, or ceilings that would contribute to the spread of fire from one room to another repaired? [NFPA 101]

Is the vertical clearance between sprinklers and material below (such as head deflectors) at least 18 inches? [29 CFR 1910.159(c)(10)]

Are accumulations of flammable or combustible waste materials and residues removed so that they will not contribute to a fire? [29 CFR 1910.38(b)(3)]

***Note:** Examples of violations include open boxes of papers stored under the stairs and stored empty cardboard boxes.*

Is adequate clearance maintained between stored materials and light fixtures to prevent possible ignition? [NFPA 231]

Is the clearance between stored materials and unit heaters, radiant space heaters, furnace ducts, and flues not less than three feet in all directions or in accordance with the clearances shown on the approval agency label? [NFPA 231]

Are furnishings or decorations of an explosive or highly flammable character prohibited? [NFPA 101]

Are decorative materials such as curtains, draperies, streamers, and fabrics flame resistant? [NFPA 101]

Do teaching materials and children's artwork cover 20% or less of the wall area? [NFPA 1]

Is your local fire department well acquainted with your facilities, its location and specific hazards?

If you have a fire alarm system, is it certified as required?

If you have a fire alarm system, is it tested at least annually?

If you have interior standpipes and valves, are they inspected regularly?

If you have outside fire hydrants, are they flushed at least once a year and on a routine preventative maintenance schedule?

Are fire doors and shutters unobstructed and protected against obstructions, including their counterweights?

Are fire doors and shutter fusible links in place?

Are automatic sprinkler system water control valves, air and water pressure checked annually as required?

Is the maintenance of automatic sprinkler systems assigned to responsible persons or to a sprinkler contractor?

Are sprinkler heads protected by metal guards, when exposed to physical damage?

Is proper clearance maintained below sprinkler heads?

Are smoke detectors operational and tested monthly?

Are portable fire extinguishers provided in adequate number and type?

Are fire extinguishers mounted in readily accessible site and their locations clearly identified?

Are fire extinguishers inspected monthly by assigned personnel to ensure adequate charge, serviceability, mounted properly and documented on the inspection tag; inspected annually by authorized distributor?

Are employees periodically instructed in the use of extinguishers and fire protection procedures?

Is there a minimum clearance of three feet between the front of electrical panels and equipment {and} any combustibles?

Is there a minimum clearance of four feet in front of heating equipment or any open flame devices?

Do elevators return to the ground floor when the fire alarm goes off?

#### **First Aid and Medical Services**

Is there a hospital, clinic, or infirmary for medical care in proximity (20 minutes of your work place)?

If medical and first aid facilities are not in proximity of your workplace, is at least one employee on each shift currently qualified to render first aid?

If an employee is expected or required to render first aid, have proper precaution been taken by the employer (offered the Hepatitis B series and document the acceptance or declination, universal precaution training, blood borne pathogen training offered and documented)?

Are medical personnel readily available for advice and consultation on matters of employee's health?

Are emergency phone numbers posted?

Are first aid kits easily accessible to each work area, with necessary supplies available, periodically inspected and replenished as needed? (Ensure the kit contains one-way micro-shield CPR devices, disposable gloves (protective), and does not contain oral medications.)

Are means provided for quick drenching or flushing of the eyes and body (for a minimum of 15 minutes) in areas where corrosive liquids or material are handled?

### **Hazard Communication**

**Guidelines:** This checklist covers hazard communication regulations (29 CFR 1910.1200) issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). The purpose of these regulations is to ensure that health and safety information about hazardous chemicals is transmitted to affected employees. These regulations are applicable to any work site where employees may be exposed to hazardous chemicals under normal conditions of use or in an emergency. The following chemicals or items are not covered by this regulation: hazardous waste, tobacco, tobacco products, wood, wood products, manufactured articles, foods, alcoholic beverages, drugs, cosmetics, consumer products, nuisance particulates, ionizing radiation, non-ionizing radiation, and biological hazards. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

### ***Hazard Communication Program***

Has a written hazard communication program been developed, implemented, and maintained at your worksite? [29 CFR 1910.1200(e)(1)]

Has a list of known hazardous chemicals at your facility been prepared? [29 CFR 1910.1200(e)(1)(i)]

Have methods been developed to inform employees of the hazards of non-routine tasks? [29 CFR 1910.1200(e)(1)(ii)]

***Note:*** Such tasks may include emergency response or equipment repair.

Are methods developed for communicating hazards to outside contractors or vendors who may be exposed to hazardous chemicals at your worksite? [29 CFR 1910.1200(e)(2)]

## ***Labels***

Are all containers of hazardous chemicals in the workplace labeled, tagged, or marked with the following information? [29 CFR 1910.1200(f)(1)]

The identity of the hazardous chemical(s)

The appropriate warnings

The name and address of the chemical manufacturer, importer, or other responsible party

**Note:** *Labels must be affixed to all containers of hazardous chemicals when they are shipped by a manufacturer or supplier. If the container is received without a hazard warning label, you must make a good faith effort to obtain the missing information from the manufacturer or supplier.*

The following hazardous chemicals are exempt from this labeling requirement, although subject to other labeling requirements: pesticides, foods, food additives, color additives, drugs, cosmetics, medical devices, alcoholic beverages, consumer products, hazardous waste, tobacco products, and wood products.

Is removal or defacing of labels on incoming containers of hazardous chemicals prohibited? [29 CFR 1910.1200(f)(8)]

Are labels or other forms of warnings legible, in English, and prominently displayed? [29 CFR 1910.1200(f)(9)]

## ***Material Safety Data Sheets***

Are material safety data sheets on hand for each hazardous chemicals used and identified on the hazardous chemicals list? [29 CFR 1910.1200(g)(1)]

If a hazardous chemical has no material safety data sheet, are attempts made to obtain one from the chemical manufacturer or importer as soon as possible? [29 CFR 1910.1200(g)(6)(iii)]

Are material safety data sheets for the hazardous chemicals kept in the facility and made readily accessible to employees? [29 CFR 1910.1200(g)(10)]

## ***Information and Training***

Is information and training on hazardous chemicals in the worksite provided on initial assignment and whenever new physical hazards or health hazards are introduced into the work area? [29 CFR 1910.1200(h)(1)]

Does the information provided include the requirements of this standard, as well as the following? [29 CFR 1910.1200(h)(2)]

The operations at the worksite where hazardous chemicals are present

The location and availability of the written hazard communication program, including the list of

hazardous chemicals and material safety data sheets

Does the training provided include information about the following? [29 CFR 1910.1200(h)(3)]

Methods and observations that may be used to detect the presence or release of a hazardous chemicals in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc)

The physical hazards and health hazards of the chemicals in the work area

The measures employees can take to protect themselves from these hazards, including procedures the employer has implemented to protect employees from exposures to hazardous chemicals (appropriate work practices, emergency procedures, and personal protective equipment)

The details of the hazard communication program developed by the employer, including explanations of the labeling system, material safety data sheets, and how employees can obtain and use the appropriate hazard information.

### ***Definitions:***

**Article:** a manufactured item other than a fluid or particle that (a) is formed to a shape or design during manufacture, (b) has end use function(s) dependent in whole or in part on its shape or design during end use, and (c) under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees.

**Hazardous chemical:** any chemical that is a physical hazard or a health hazard.

**Health hazard:** a chemical for which statistically significant evidence exists that acute or chronic health effects may occur in exposed employees. This evidence must be based on at least one study conducted in accordance with established scientific principles. The term includes chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosive, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

**Physical hazard:** a chemical for which scientifically valid evidence exists that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, and oxidizer, pyrophoric, unstable (reactive) or water-reactive.

### **Hazardous Chemical Exposure**



Questions marked with this symbol may require the help of an outside expert.

Are employees trained in safe handling of hazardous chemicals such as acids, caustics, etc.?

Are bulk drums of flammable liquids and transfer vessels grounded and bonded during dispersing (drums must be part of the grounding system)?

Are employees aware of the potential hazards involving various chemicals stored or used in the workplace such as acids, bases, caustics, epoxies, phenols, etc.?



Is employee exposure to chemicals kept within acceptable levels?

Are eye wash fountains and safety showers provided in areas where corrosive chemicals are handled?

Are all containers, such as vats, storage tanks, etc., labeled as to their contents, e.g., “CAUSTICS”?

Are all employees required to use personal protective clothing and equipment when handling chemicals (gloves, eye protection, respirators, etc.)?

Are flammable or toxic chemicals kept in closed containers when not in use?

Are chemical piping systems clearly marked as to their content?

Where corrosive chemical liquids are frequently handled in open containers or drawn from storage vessels or pipelines, are adequate means readily available for neutralizing or disposing of spills or overflows properly and safely?

Have standard operating procedures been established and are they being followed when cleaning up chemical spills?

Where needed for emergency use, are respirators stored in a convenient, clean, and sanitary location with an appropriate inspection record?

Are respirators intended for emergency use adequate for the various uses for which they may be needed?

Are employees prohibited from eating in areas where hazardous chemicals are present?

Is personal protective equipment provided, used, and maintained whenever necessary?

Are there written standard operating procedures for the selection and use of respirators where needed?

If you have a written respirator protection program, are your employees instructed on the correct usage and limitations of the respirators? Are the respirators NIOSH approved for this particular application? Are they regularly inspected and cleaned, sanitized and maintained? Is the inspection documented?

Are you familiar with the Threshold Limit Values or Permissible Exposure Limits of airborne contaminants and physical agents used in your workplace?

Have control procedures been instituted for hazardous materials, where appropriate, such as respirators, ventilation systems, handling practices, etc.?

Whenever possible are hazardous substances handled in properly designed and exhausted booths or similar locations?

Do you use general dilution or local exhaust ventilation systems to control dusts, vapors, gases, fumes, smoke, solvents, or mists which may be generated in your workplace?

Is ventilation equipment provided for removal of contaminants from such operations as: production grinding, buffing, spray painting, and/or vapor degreasing, and is it operating properly?

Do employees complain about dizziness, headaches, nausea, irritation, or other factors of discomfort when they use solvents or other chemicals?

Is there a dermatitis problem? Do employees complain about dryness, irritation, or sensitization of the skin?

If internal combustion engines are used, is carbon monoxide kept within acceptable limits?

Is vacuuming used, rather than blowing or sweeping dust whenever possible for clean up?

Are materials that give off toxic asphyxiate, suffocation, or anesthetic fumes, stored in remote locations when not in use?

Have you considered the use of an industrial hygienist or environmental health specialist to evaluate your operation?

#### **Indoor Air Quality**

**Guidelines:** This checklist covers general recommendations for addressing indoor air quality issues in school districts. No Federal regulations or laws require these recommendations. States, however, may have additional regulations that apply.



Questions marked with this symbol may require the help of an outside expert.

#### ***General***

Is someone designated to develop and implement an indoor air quality management plan for your school district?

Does your district have an indoor air quality management plan that includes steps for preventing and resolving indoor air quality problems?

Has your school district been tested for radon, and have radon-mitigation systems installed where needed?

Does your school district use integrated pest management principles in all areas?

Is spot-treatment of pesticides used to control infested areas?

Are all pesticide applicators trained in the safe use of pesticides?

Have painted surfaces in your district been tested for lead-based paint, and has a lead control or removal program been implemented?

Are school buildings inspected once or twice each year for conditions that may lead to indoor air quality problems?

Is a preventive maintenance schedule established and in operation for the heating, ventilation, and air conditioning (HVAC) system? Is the schedule in accordance with the manufacturer's recommendations or accepted practice for the HVAC system?

Does the HVAC preventive maintenance schedule include the following?:  
checking and/or changing air filters and belts, lubricating equipment parts,  
checking the motors, and confirming that all equipment is in operating order.

Are damaged or inoperable components of the HVAC system replaced or repaired as appropriate?

Are reservoirs or parts of the HVAC system with standing water checked visually for microbial growth?

Are water leaks that could promote growth of biologic agents promptly repaired?

Are damp or wet materials that could promote growth of biologic agents promptly dried, replaced, removed, or cleaned?

Are microbial contaminants removed from ductwork, humidifiers, other HVAC and building system components, and from building surfaces such as carpeting and ceiling tiles when found during regular or emergency maintenance activities or visual inspection?



Is general or local exhaust ventilation used where housekeeping and maintenance activities could reasonably be expected to result in exposure to hazardous substances above applicable exposure limits?



When point sources generate airborne concentrations of contaminants above applicable limits, are local exhaust ventilation or substitution used to reduce the exposure concentrations to below the limits?



When the carbon dioxide level exceeds 1,000 parts per million, is the HVAC system checked and repaired as necessary to ensure the system is operating properly?

When the temperature is outside of the range of 68 to 79°F, is the HVAC system checked and repaired as necessary to ensure the system is operating properly?

Are humidity levels maintained between 30% to 60% relative humidity?

When a contaminant is identified in the make-up air supply, is the source of the contaminant eliminated, or are the make-up inlets or exhaust air outlets relocated to avoid entry of the contaminant into the air system?



If buildings do not have mechanical ventilation, are windows, doors, vents, stacks, and other portals used for natural ventilation operating properly?

Are complaints promptly investigated that may involve a building-related illness?

### ***Smoking***

Is smoking in school buildings prohibited except as part of a classroom instruction or a theatrical production?

Do written district board of education policies and procedures prohibit smoking in school buildings?

### ***Renovations and Remodeling***

During renovation work or new construction, are local ventilation or other protective devices used to safeguard employees and students from dust, stones, other small particles, and toxic gases, which may be harmful in certain quantities?

Are renovation areas in occupied buildings isolated so that dust and debris is confined to the renovation or construction area?

Are precautions implemented in case lead-based paint is disturbed during renovation or new construction?

When renovating or during new construction, are product labels checked, or is information obtained on whether paints, adhesives, sealants, solvents, insulation, particle board, plywood, floor coverings, carpet backing, textiles or other materials contain volatile organic compounds that could be emitted during regular use?

Is the information referred to in Question 29 used to select products and to determine necessary measures to be taken to comply with indoor air quality regulations?

Are employees notified at least 24 hours in advance, or promptly in emergency situations, of work to be performed on the building that may introduce air contaminants into their work area?

### ***Recordkeeping***

Is the maintenance schedule updated to show all maintenance performed on the building systems?

Does the maintenance schedule include the dates that the building systems maintenance was performed and the names of the persons or companies performing the work?

Are maintenance schedules retained for at least three years?

## ***Definitions:***

**Building systems** includes the heating, ventilation and air-conditioning (HVAC) system, the energy management system, and all other systems in a facility that may impact indoor air quality.

**Integrated pest management** is a sustainable approach to controlling pests by using biological, mechanical, physical, and chemical means in ways that minimize health risks, environmental risks, and cost.

**Additional Information:** For additional information and resources for addressing indoor air quality issues in schools, contact the Environmental Protection Agency (EPA) Indoor Air Quality Information Clearinghouse at 1-800-438-4318 or the Web site <http://www.epa.gov/iaq/schools/index.html>.

## **Noise (occupational)**

**Guidelines:** This checklist is based on regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.95. These regulations are not designed to cover nuisance noise exposure (e.g. ambient noise, road traffic, etc.). They are designed to protect against hearing loss and apply to situations in which noise levels equal or exceed 85 dBA as an 8-hour time-weighted-average. The OSHA permissible exposure limit (PEL) for noise is 90 dBA. The National Institute for Occupational Safety and Health (NIOSH), however, recommends a different, more protective standard to prevent hearing loss. Please contact NIOSH (1-800-35-NIOSH) for information on their recommendations. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a non-regulatory recommendation.



Questions marked with this symbol may require the help of an outside expert.

Noise-generating operations, processes, and equipment to which people are exposed may cause hearing loss depending on the intensity and duration of exposure. Noisy machinery does not automatically mean a problem exists. As a general rule, if normal conversation is difficult between two people standing at arms length, further investigation is warranted. If noise problems are suspected, a formal evaluation by a qualified person, such as an industrial hygienist, is recommended to determine compliance. The questions below provide general guidance in evaluating your lab, shop or classroom.



Have all operations or equipment believed to exceed an 8 hour time-weighted average of 85 **dBA** been measured to determine their noise levels? [29 CFR 1910.95(d)(1)]



If noise levels from operations or equipment equal or exceed 85 dBA, has personal noise dosimetry been performed on exposed persons to determine their 8-hour time-weighted-averages? [29 CFR 1910.95(d)(1)(ii)]



Does the school administer a continuing, effective hearing conservation program when noise exposures equal or exceed 85 dBA as an 8-hour time-weighted-average? [29 CFR 1910.95(c)]

Are hearing protectors available at no cost to all persons exposed to noise levels at or above 85 dBA as an 8-hour time-weighted-average? [29 CFR 1910.95(i)(1)]



Have feasible engineering or administrative controls been used to reduce operation or equipment noise levels to below 90 dBA as an 8-hour time-weighted-average? [29 CFR 1910.95(b)(1)]

Are noise measurements repeated when a change in operations or equipment may increase noise exposure? [29 CFR 1910.95(d)(3)]

Are employees permitted to observe noise measurements? [29 CFR 1910.95(f)]

Are employees notified of noise monitoring results when exposures equal or exceed 85 dBA as an 8-hour time-weighted-average? [29 CFR 1910.95(e)]



Are hearing protectors evaluated to verify that they effectively reduce noise to levels below 85 dBA as an 8-hour time-weighted-average? [29 CFR 1910.95(j)(1)]

Are noise measurement records maintained for at least two years? [29 CFR 1910.95(m)(3)(i)]

Are employees' hearing test records maintained for the duration of matriculation or employment? [29 CFR 1910.95(m)(i)]

Is a copy of the OSHA noise standard available to employees or students, with a copy posted in the classroom or work area? [29 CFR 1910.95(l)(1)]



If noise measurements indicate an 8-hour time-weighted-average of 85 dBA or greater, is a training program given that covers the effects of noise on hearing; the purpose of hearing protection and how to use it; and the purpose of audiometric testing? [29 CFR 1910.95(k)(3)(i),(ii),and (iii)]



If noise measurements indicate an 8-hour time-weighted-average of 85 dBA or greater, are baseline and annual audiometric tests given at no cost to employees or students using properly calibrated testing equipment? [29 CFR 1910.95(g)(1),(2),(3),(4),and(h)]

Are audiometric tests preceded by at least 14 hours without career-technical or occupational noise exposure? [29 CFR 1910.95(g)(5)(iii)]



Are audiometric tests conducted by a licensed or certified audiologist; otolaryngologist, or other physician; or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation or who has demonstrated competence in administering audiometric tests? [29 CFR 1910.95(g)(3)]

If audiometric tests show hearing loss due to noise exposure at work, are procedures in place for appropriate referrals, mandatory use of hearing protection, and training? [29 CFR 1910.95(g)(8)(ii)(a)(b),and(c)]



Do all students or employees exposed to 85 **dba** or above as an **8-hour time-weighted-average** receive hearing conservation training when they begin work and annually thereafter? [29 CFR 1910.95(k)(1)and(2)]

### ***Definitions:***

**8-hour time-weighted average:** an average exposure weighted to account for time and changing noise levels throughout an 8-hour day.

**Administrative controls:** reducing the period of personal noise exposure by job rotation or adding periods of quiet to the work day or work process such that the 8-hour time-weighted-average noise level does not exceed permissible limits.

**dba:** noise levels in decibels measured with a sound level meter set to the A scale. The A scale simulates how humans hear noise levels at different frequencies.

**Permissible Exposure Limit (PEL):** an employee's exposure limit to an airborne concentration of a substance which OSHA/USDOL publishes and enforces. It is expressed as an 8-hr time-weighted average (TWA). PELs are protective limits that shall not be exceeded.

### **Personal Protective Equipment (PPE)**

**Guidelines:** This checklist covers the use of personal protective equipment, including, but is not limited to, safety glasses, goggles, hard hats, gloves, safety shoes, and heat or electrically resistant clothing. Electrical protective equipment, respiratory protection, hearing protection, PPE for construction site lasers, and equipment like safety belts, lifelines, lanyards, and safety nets, are addressed in separate checklists.

It is important to note that engineering controls should be the primary method of establishing a safe workplace. Personal protective equipment should only be used where engineering controls are not feasible.

### ***General Requirements***

Has a hazard assessment been conducted in the workplace to identify possible hazards that would require the use of PPE? [29 CFR 1910.132(d)(1)]

**Note:** *The OSHA standard has a non-mandatory Appendix B which contains example procedures for conducting a hazard assessment.*

Is there a written certification of hazard assessment which identifies the workplace evaluated, the person certifying that the evaluation has been performed, and the date(s) of the hazard assessment? [29 CFR 1910.132(d)(2)]

Based on the hazards identified, has PPE been selected for all appropriate individuals? [29 CFR 1910.132(d)(1)(i)]

Have individuals involved been informed of the PPE selection decisions? [29 CFR 1910.132(d)(1)(ii)]

If PPE is necessary to prevent injury or impairment by exposure to chemical hazards, radiological hazards, or mechanical irritants through absorption, inhalation or physical contact, is it provided? [29 CFR 1910.132(a) and 1926.95(a)]

Has the selected PPE been fitted to appropriate individuals? [29 CFR 1910.132(d)(1)(iii)]

Is PPE maintained in a sanitary and reliable condition? [29 CFR 1910.132(a) and 1926.95(a) and (b)]

Do appropriate individuals use the PPE selected? [29 CFR 1910.132(d)(1)(i)]

Is defective or damaged PPE removed from service immediately? (shall not be used) [29 CFR 1910.132(e)]

### ***Training***

Has each individual who is required to use PPE been provided with training? [29 CFR 1910.132(f)(1)]

Has training on PPE included all of the following elements: when PPE is necessary; what PPE is necessary; how to properly don, doff, adjust, and wear PPE; the limitations of the PPE; and the proper care, maintenance, useful life and disposal of the PPE. [29 CFR 1910.132(f)(1)(i)-(iv)]

Have the trained individuals demonstrated an understanding of the training and the ability to use PPE properly before being allowed to perform work requiring the use of PPE? [29 CFR 1910.132(f)(2)]

Are individuals retrained when there is reason to believe that they do not have the understanding or skill to use PPE properly? [29 CFR 1910.132(f)(3)]

Is retraining conducted whenever changes in the workplace or changes in types of PPE make previous training obsolete? [29 CFR 1910.132(f)(3)(i)-(iii)]

Is there written certification for each person who has received PPE training that includes the following: a statement indicating the person understood the training; the name of the person trained; the date(s) of the training; and the subject of the certification? [29 CFR 1910.132(f)(4)]

### ***Head, Foot, and Hand Protection***

Are protective helmets used wherever there is the possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns? [29 CFR 1910.132(a), 1910.135(a), 1926.95(a), and 1926.100(a)]

Do protective helmets that are used in the workplace that were purchased prior to July 5, 1994 meet the American National Standard Safety Requirements for Industrial Head Protection, ANSI Z89.1-1969? [29 CFR 1910.135(b)(2) and 1926.100(b)]

Do protective helmets that are used in the workplace that were purchased after July 5, 1994 meet the American National Standard for Personnel Protection--Protective Headwear for Industrial Workers--Requirements, ANSI Z89.1-1986? [29 CFR 1910.135(b)(1)]

Is protective footwear used wherever there is the danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where feet are exposed to electrical hazards? [29 CFR 1910.136(a)]

Does protective footwear that is used in the workplace that was purchased prior to July 5, 1994 meet the requirements of the American National Standard for Men's Safety-Toe Footwear, ANSI Z41.1-1967? [29 CFR 1910.136(b)(2)]

Does protective footwear that is used in the workplace that was purchased after July 5, 1994 meet the requirements of the American National Standard for Personal Protection--Protective Footwear, ANSI Z41-1991? [29 CFR 1910.136(b)(1)]

Are appropriate protective gloves used wherever there is the danger to hands of exposure to hazards such as those from skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes? [29 CFR 1910.138(a)]

### ***Eye and Face Protection***

Are individuals issued and required to wear appropriate eye protective devices while participating or observing activities which present a potential eye safety hazard? [29 CFR 1910.133(a) and 1926.102(a)]

***Note:*** Eye potential hazards include: caustic or explosive chemicals or materials, hot liquids or solids, molten materials, welding operations of any type, repairing or servicing of vehicles, heat treatment or tempering of metals, the shaping of solid materials and laser device operation and experimentation.

Do all protective eye and face devices purchased after July 5, 1994 comply with Z87.1-1989? [29 CFR 1910.133(b) and 1926.102(a)(2)]

***Note:** Regular prescription eye glasses do not meet this requirement. Goggles or other protective glasses meeting the American National Standard must be worn over-top prescription eye glasses.*

### ***Posting Requirements***

Are all lab or shop entrances, areas and equipment requiring the use of PPE devices posted with a sign indicating this requirement? [29 CFR 1910.145(c)(3)]

### **Pesticides**

**Guidelines:** Pesticide manufacturing, packaging, distribution and application are regulated by the Environmental Protection Agency (EPA) under subchapter E, 40 CFR Parts 150 to 189. States develop their own pesticide regulations and enforcement programs in accordance with EPA regulations.

The following checklist is based on New Jersey State regulations and may be used as a general guidance for assessing pesticide applications in schools. Consult your State pesticide enforcement agency to determine what regulations are applicable in your State.

Some questions have no code reference. These questions are provided as recommended good practice.

### ***Restricted-use Pesticides***

Are restricted-use pesticides applied only by a certified applicator or someone under the direct supervision of a certified applicator?

***Note:** Some pesticides that pose special risks to the environment or the public health are classified as restricted- use by the Environmental Protection Agency or your State. A certified applicator has passed written exams demonstrating his or her knowledge about pesticide use and has met other licensing requirements.*

Is a separate storage area available for restricted-use pesticides? Is it locked when unattended, and the windows tight, barred, or boarded over?

Is the storage area properly ventilated to prevent buildup of noxious fumes?

Are herbicides stored separately from other pesticides?

### ***All Pesticides***

Is a separate space available to store pesticides?

Is the pesticide storage area restricted to a first-story room or area that has direct access to the outside?

Are all pesticides kept in this storage area rather than in a garage, basement, refrigerator, or other areas accessible to unauthorized persons?

Are signs posted on the storage area indicating that pesticides are stored inside?

Do all pesticide containers used for storage have a complete, readable registered label?

Do all pesticide service containers have a copy of the registered label or a readable label with the following information:

- a. brand or trade name,
- b. EPA registration number,
- c. name and percentage of active ingredient(s) in the service container, and
- d. an appropriate sign, that is, Danger-poison, Warning, or Caution?

Do you keep a list, separate from the storage area, of all pesticides stored?

Is a material safety data sheet available for each pesticide at each storage location?

Does the fire department have a copy of this list?

Do you check periodically for leaking containers?

Are damaged or leaking containers immediately separated and disposed of in accordance with state regulations?

Are pesticides stored in the original container rather than in milk jugs, soda bottles, or other containers commonly used for food or drink?

Do you carefully read the label before mixing and applying the pesticide?

***Note:** No person shall use or apply a pesticide in a manner inconsistent with its Federal or State registered label or labeling.*

Do you make note of the safety precautions and antidotes before mixing and applying the pesticide?

Do you read the label to see what protective clothing you should wear?

***Note:** All persons using pesticides must be provided appropriate safety equipment in good working order.*

Do you know how to use the protective equipment recommended on the label?

***Note:** All persons using pesticides must be provided training in the proper operation of safety equipment.*

Do you clean and maintain your protective equipment regularly and often?

Do you check your protective equipment for wear and tear before each use?

Do you know what to do if you spill a pesticide on yourself while mixing?

Do you wear adequate footgear with your pant cuffs on the outside so pesticides won't run into your footgear?



Do you have sawdust, vermiculite, kitty litter, or other absorbent material on hand to soak up spills?

Do you have a list of emergency numbers to call in case of spill?

Is your application equipment well maintained and calibrated so it doesn't leak or dispense the improper amount of pesticide?

Do you avoid draining leftover spray mix on the ground?

***Note:** No person shall clean or rinse containers or application equipment that holds or has held a pesticide in a manner that causes harm, injury, or damage to persons, property, or the environment, or a significant risk of harm, injury, or damage.*

Do you rinse each empty liquid container at least three times and return the rinsate into the tank?

Do you keep used containers in the storage area until disposed of?

Do you collect every container, for disposal or storage, before leaving an application site?

Do you dispose of all pesticide containers and unused pesticides in accordance with State regulations?

Do you puncture, break, or crush containers before disposal so they cannot be reused?

Do you keep your spray equipment clean so that those touching it will not be contaminated?

Do you always release pressure on your equipment so spray guns won't be accidentally triggered?

Do you check the wind direction and speed and the area downwind before applying pesticides?

***Note:** No person shall apply a pesticide to a target site in such a manner or under such conditions that drift or other movement of the pesticide, which is avoidable through reasonable precautions, infringes on a non-target site.*

Do you consider substituting a less toxic chemical if you are spraying near a sensitive area?

Do you check for the possibility of showers and damaging runoff before applying pesticides?

***Note:** No person shall apply pesticides in a manner that causes harm, injury, or damage to persons, property, or the environment, or a significant risk of harm, injury, or damage.*

Do you plan your pesticide application so it will have little or no effect on bees, birds, fish, or other wildlife?

### ***Definitions:***

**Restricted-use pesticide:** any pesticide or pesticide use so classified under the provisions of your State code, or so classified by the Administrator of the United States Environmental Protection Agency.

### **Record-Keeping**

Are employee's medical records and the record of employee's exposure harmful to hazardous substances or physical agents up-to-date (must be kept confidential and separate personnel files)?

Are employee training records maintained and available for employee review?

Have arrangements been made to maintain required records for the legal period of time for each specific type record?

Are operating permits and records up-to-date for such items as elevators, air pressure tanks, and liquefied petroleum gas tanks, etc.?

### **Safety and Health Program**

Is there a written policy statement?

Are current policy statements signed by management?

Are copies of the policy provided to new employees?

Is someone responsible for the development, implementation and enforcement of the accident prevention plan?

Are employee/supervisor responsibilities and authority assigned?

Has a safety team been established to monitor the safety and health program?

Is there an established procedure for handling employee safety and health complaints?

Do you have an active safety and health program in operation?

Is one person clearly responsible for the overall activities of the safety and health program?

Do you have a safety committee or group made up of management and labor representatives that meet regularly and report in writing on its activities?

Do you have a working procedure for handling in-house employee complaints regarding safety and health?

Are you keeping your employees advised of the successful effort and accomplishments you and/or your safety committee have made in assuring they will have a workplace that is safe and healthful?

Are professional safety services or other sources utilized in revising or updating safety program?

Are follow-up procedures in place?

Is safety accountability included in all annual performance communications documents?

Are records kept on job-related accidents, injuries and illnesses?

Is there written documentation of safety activities) meetings, training, inspections, etc.)?

#### **Safety and Health Training**

Have new employees received orientation training?

Do employees participate in regularly scheduled safety meetings?

Does management provide resources and participate in employee training?

Have employees received and documented required training?

Do all employees receive refresher training at least annually?

Have employees received instruction on reporting procedures to report unsafe conditions, defective equipment, unsafe acts, incidents, accidents and near misses?

Have supervisors received instruction in accident investigation and hazard abatement?

#### **Sanitation - Procedures for Equipment and Clothing**

Is personal protective clothing or equipment that employees are required to wear or use, of a type capable of being cleaned easily and disinfected?

Are employees prohibited from interchanging personal protective equipment, unless it has been properly cleaned?

Are machines and equipment, which process, handle or apply materials that could be injurious to employees, cleaned and/or decontaminated before being overhauled or placed in storage?

Are employees prohibited from smoking or eating in any area where contaminants that could be injurious if ingested are present?

When employees are required to change from street clothing into protective clothing, is a clean change room with separate storage facility for street and protective clothing provided?

Are employees required to shower and wash their hair as soon as possible after a known contact has occurred with a carcinogen?

When equipment, materials, or other items are taken into or removed from a carcinogen-regulated area, is it done in a manner that will contaminate non-regulated areas or the external environment?

## **Transporting Employees and Materials**

Do employees who operate vehicles on public thoroughfares have valid operator's licenses?

When seven or more employees are regularly transported in a van, bus or truck, is the operator's license appropriate for the class of vehicle being driven?

Is each van bus or truck used regularly to transport employees, equipped with an adequate number of seats?

When employees are transported by truck, are provisions provided to prevent their falling from the vehicle?

Are vehicle used to transport employees equipped with lamps, breaks, horns, mirrors, windshields and turn signals in good repair?

Are transport vehicles provided with handrails, steps, stirrups or similar devices, so placed and arranged that employees can safely mount or dismount?

Are employee transport vehicles equipped at all times with at least two reflective type flares?

Is a full charged fire extinguisher, in good condition, with at least 4 B:C rating maintained in each employee transport vehicle?

When cutting tools or tools with sharp edges are carried in passenger compartments of employee transport vehicles, are they placed in closed boxes or containers which are secured in place?

Are employees prohibited from riding on top of any load that can shift, topple, or otherwise become unstable?

## **FACILITY INSPECTIONS**

### **Aisles/Walkways**

Are aisles and passageways kept clear?

Are aisles and walkways marked appropriately?

Are wet surfaces covered with non-slip materials?

Are holes in the floor, sidewalk or other walking surfaces repaired properly, covered or otherwise made safe?

Are there safe clearances for walking in aisles where motorized or mechanical handling equipment is operating?

Are materials or equipment stored in such a way that sharp projectives will not interfere with the walkway?

Are spilled materials cleaned up immediately?

Are changes of direction or elevation readily identifiable?

Are aisles or walkways that pass near moving or operating machinery, welding operations or similar operations arranged so employees will not be subjected to potential hazards?

Is adequate headroom provided for entire length of any aisle or walkway?

Are standard guardrails provided whenever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground?

Are bridges provided over conveyors and similar hazards?

#### **Building Inspection – Exterior**

Is building address or identification clearly visible?

Is an unobstructed access road to the building provided?

Are all building sides accessible to emergency equipment?

Are fire hydrants accessible?

Are sprinkler/standpipe connections accessible?

Are sprinkler/standpipe connections clearly marked?

Does building appear to be in good repair?

Is building free from signs of vandalism?

Are exterior walls free from cracks or other damage?

Are windows free from cracks or broken panes?

Has vegetation been cut back from the building?

Are combustible materials stored away from the building?

Are there any signs of damage to the building?

#### ***Parking Lots***

Are parking lots free of hazardous breakup, damage and debris?

Are dead tree limbs trimmed?

Are parking barriers in good repair and properly placed?

Are parking lots included in the inspection program?

***Sidewalks (also see “SIDEWALKS” checklist section)***

Are sidewalks free of hazardous cracks, break-up, damages and debris?

Are sidewalks surfaces have non-slip characteristics?

Are sidewalks included in the inspection program?

***Steps and Stairs (also see “STAIRS (Fixed)” checklist section)***

Are steps and stairs free of hazardous cracks, break-up, damages and debris?

Are stairs and stairways surfaces non-slip in character?

Are handrails in place and in good repair where appropriate?

Are steps and stairs included in the inspection program?

**Building Inspection – Interior (Including Offices)**

***Electrical***

Are all electrical panels secured?

Is a 3-foot clearance provided around all electrical panels?

Are all electrical rooms free from combustible storage?

Are all electrical panels cool to the touch?

Are all electrical panels free from evidence of burning?

Have all electrical circuits been identified?

Are all electrical switches and receptacles in good repair?

Has the use of extension cords been discontinued?

Have GFCIs been provided on circuits in proximity to water?

***Heating system***

Is a 3-foot clearance provided around all heating equipment?

Are furnace/boiler rooms kept locked?

Are furnace/boiler rooms free from combustible storage?

***Smoking***

Is smoking prohibited in the building?

Are designated smoking areas properly identified?

Are non-combustible receptacles provided in smoking areas?

Are smoking materials disposed of properly?

### ***Housekeeping***

Is the work area clean and orderly?

Have all unnecessary items been removed?

Are floors clean, dry and not slippery?

Are spills mopped up in a timely manner?

Is someone designated to monitor removal of slip, trip and fall hazards (slippery rugs, upturned rug edges, frayed carpet, loose cords, melting ice and snow)?

Are aisles and passageways clearly marked?

Is regular pest control performed (if necessary)?

Is trash removed from the building daily?

Is storage restricted to designated areas?

Is storage neatly arranged?

### **Classroom (General Conditions)**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) general industry standards (29 CFR 1910.22, 1910.141 and 1910.176). These regulations apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. In addition, two questions were included that address recommended practices.

Are all changes in classroom use and alterations, repairs, construction, or installation of new equipment reviewed with the appropriate State and local agency that has jurisdiction over school modifications? [recommended]

Is an electric solenoid key-operated gas shut-off switch installed on each gas supply line to your shop, lab or instructional area? [recommended]

Are classrooms kept clean and free from debris to the greatest extent practical given the types of activities being performed? [29 CFR 1910.141(a)(3)(i)]

Are waste materials that are prone to rotting placed in leak proof receptacles with tight fitting covers and removed daily for disposal? [29 CFR 1910.141(a)(4) and (g)(3)]

Are classrooms maintained, as far as reasonably practicable, to prevent the entrance or harborage of rodents, insects, and other vermin? [29 CFR 1910.141(a)(5)]

Is water available that is suitable for drinking, personal hygiene, food preparation or cleaning? [29 CFR 1910.141(b)(1)(i)]

Are all non-drinkable water outlets clearly marked as such? [29 CFR 1910.141(b)(2)(i)]

Are lavatories equipped with hot and cold running water, hand soap, and towels or driers? [29 CFR 1910.141(d)(2)(ii),(iii),(iv)]

Where showers are required, are soap, hot and cold running water through a common discharge line, and individual towels provided? [29 CFR 1910.141(d)(3)(iii),(iv),(v)]

Is the consumption of food and beverages prohibited in or near toilet rooms or areas containing toxic materials? [29 CFR 1910.141(g)(2)]

Is storage of food or beverages prohibited in toilet rooms or in an area exposed to a toxic material? [29 CFR 1910.141(g)(4)] Where employees are required to wear protective clothing, are change rooms provided with storage facilities for street clothes and separate storage facilities for the protective clothing? [29 CFR 1910.141(e)]

Is material stored so as not to create a hazard? [29 CFR 1910.176(b)]

***Note:** Bags, containers, bundles, etc., stored in tiers must be stacked, blocked, interlocked, and limited in height so that they are stable and secured against sliding and collapse.*

Are storage areas kept free from hazards that may cause tripping, fire, explosion, or pest harborage? [29 CFR 1910.176(c)]

Is sufficient safe clearance available through aisles, loading docks, turns, or doorways when mechanical handling equipment is used? [29 CFR 1910.176(a)]

Are head clearance warning signs provided where needed? [29 CFR 1910.176(e)] Are all passageways, work areas, storerooms, and washing facilities kept orderly and sanitary? [29 CFR 1910.22(a)(1)]

***Note:** Examples of violations include floor areas strewn with lumber, tires, books, and boxes.*

Are all floors kept clean and as far as possible dry? [29 CFR 1910.22(a)(2)]

If floors are likely to get wet (such as in food preparation), are platforms, mats, or other dry standing places provided where practicable? [29 CFR 1910.22(a)(2)]

Are all floors kept free of protruding nails, splinters, holes, or loose boards? [29 CFR 1910.22(a)(3) and 1910.141(a)(3)(iii)]



Are aisles and passageways kept clear and in good repair, with no obstructions that could create a hazard?  
[29 CFR 1910.22(b)(1)]

Are covers and/or guardrails provided to protect people from falling into pits, tanks, vats, ditches, etc.? [29 CFR 1910.22(c)] (see checklist **Guarding Floor, Stairs, and Other Openings**)

Are areas used for storage of materials marked with conspicuous signs that indicate the load-bearing capacity of the floor? [29 CFR 1910.22(d)(1)]

Is the weight of stored materials assessed to ensure that it is below the load-bearing capacity of the floor? [29 CFR 1910.22(d)(2)]

### **Confined Spaces**

Are confined spaces thoroughly emptied of any corrosive or hazardous substances, such as acids or caustics, before entry?

Are all lines to a confined space, containing inert, toxic, flammable, or corrosive materials valved off and blanked or disconnected and separated before entry?

Are all impellers, agitators, or other moving equipment inside confined spaces locked-out if they present a hazard?

Is either natural or mechanical ventilation provided prior to confined space entry?

Are appropriate atmospheric tests performed to check Oxygen deficiency, toxic substances and explosive concentrations in the confined space before entry?

Is adequate illumination provided for the work to be performed in the confined space?

Is the atmosphere inside the confined space frequently tested or continuously monitored during conduct of work?

Is there an assigned safety standby employee outside of the confined space, when required, whose sole responsibility is to watch the work in progress, sound an alarm if necessary, and render assistance?

Is the standby employee appropriately trained and equipped to handle an emergency?

Is the standby employee or other employees prohibited from entering the confined space without lifelines and respiratory equipment if there is any question as to the cause of an emergency?

Is the approved respiratory equipment required if the atmosphere inside the confined space cannot be made acceptable?

Is all portable electrical equipment used inside confined spaces either grounded or insulated, or equipped with ground fault protection?

Before gas welding or burning is started in a confined space, are hoses checked for leaks, compressed gas bottles forbidden inside of the confined space, torches lighted only

outside of the confined area and the confined area tested for an explosive atmosphere each time before a lighted torch is to be taken into the confined space?

If the employees will be using oxygen-consuming equipment such as salamanders, torches, furnaces, etc., in a confined space, is sufficient air provided to assure combustion without reducing the oxygen concentration of the atmosphere below 19.5% by volume?

Whenever combustion-type equipment is used in a confined space, are provisions made to ensure that exhaust gases are vented outside the enclosure?

Is each confined space for decaying vegetation or animal matter that may produce methane?

Is the confined space checked for possible industrial waste that could contain toxic properties?

If the combined space is below the ground and near areas where motor vehicles will be operating, is it possible for vehicle exhaust or carbon monoxide to enter the space?

#### **Electrical (General)**

Do you specify compliance with National Electrical Code (NEC) for all contract electrical work?

Are all outlets grounded?

Are “cheater plugs” (3 prong to 2 prong) being used?

Are all employees required to report as soon as practicable any obvious hazard to life or property observed in connection with electrical equipment or lines?

Are employees instructed to make preliminary inspections and/or appropriate tests to determine what conditions exist before starting work on electrical equipment or lines?

When electrical equipment or lines are to be serviced, maintained, or adjusted, are necessary switches opened, locked-out and tagged whenever possible?

Are portable electric tools, electrical appliances such as vacuum cleaners, polishers, vending machines etc., and equipment grounded or of the double insulated type?

Do extension cords being used have a grounding conductor?

Are multiple plug adapters prohibited?

Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?

Do you have electrical installations in hazardous dust or vapor areas? If so, do they meet the National Electrical Code (NEC) for hazardous locations?

Is exposed wiring and cords with frayed or deteriorated insulation repaired or replaced promptly?

Are flexible cords and cables free of splices or taps?

Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, equipment, etc., and is the cord jacket securely held in place?

Are all cord, cable and raceway connections intact and secure?

In wet or damp locations, are electrical tools and equipment appropriate for the use or location or otherwise protected?

Is the location of electric power lines and cables (overhead, underground, under-floor, other than side-walls, etc.) determined before digging, drilling, or similar work is begun?

Are metal measuring tapes, ropes, hand-lines or similar devices with metallic thread woven into the fabric prohibited where they could come into contact with energized parts of equipment or circuit conductors?

Is the use of metal ladders prohibited in areas where the ladders or the person using the ladder could come into contact with energized parts of equipment, fixtures, or circuit conductors?

Are all disconnecting switches and circuit breakers labeled to indicate their use or equipment served?

Are disconnecting means always opened before fuses are replaced?

Do all interior wiring systems include provisions for grounding metal parts of electrical raceways, equipment and enclosures?

Are all electrical raceways and enclosures securely fastened in place?

Are all energized parts of electrical circuits and equipment guarded against accidental contact by approved cabinets or enclosures?

Is sufficient access and working space provided and maintained about all electrical equipment to permit ready and safe operations and maintenance?

Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs or plates?

Are electrical enclosures such as switches, receptacles, junction boxes, etc., provided with tight-fitting covers or plates?

Are disconnecting switches for electrical motors in excess of two horsepower, capable of opening the circuit when the motor is in a stalled condition, without exploding?  
(Switches must be horsepower rated equal to or in excess of the motor hp rating)

Is low voltage protection provided in the control device of motors driving machines or equipment, which cause probable injury from inadvertent starting?

Is each motor disconnecting switch or circuit breaker located within sight of the motor control device?

Is each motor located within sight of its controller or the controller disconnecting means capable of being locked in the open position or is a separate disconnecting means installed in the circuit within sight of the motor?

Is the controller for each motor in excess of two horsepower, rated in horsepower equal to or in excess of the rating of the motor it serves?

Are employees who regularly work on or around energized electrical equipment or lines instructed in the cardio-pulmonary resuscitation (CPR) methods?

Are employees prohibited from working alone on energized lines or equipment over 500 volts?

#### **Electrical (Use of Electrical Equipment)**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.334. It applies to all electrical use systems. This checklist does not apply to qualified persons working on installations in vehicles and generation, transmission, distribution, communications, and railway installations. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a non-regulatory recommendation.

#### ***Portable Electric Equipment***

Is portable equipment handled in a manner that will not cause damage? [29 CFR 1910.334(a)(1)]

Is the use of flexible cords connected to equipment for raising or lowering that equipment prohibited? [29 CFR 1910.334(a)(1)]

Is it prohibited to fasten flexible cords with staples or hang them in a manner that could damage the outer jacket or insulation? [29 CFR 1910.334(a)(1)]

Are portable cord and plug-connected equipment and flexible cord sets (extension cords) visually inspected before use every day? [29 CFR 1910.334(a)(2)(i)]

***Note:** Cord and plug-connected equipment and flexible cord sets that remain connected (once they are put in place) and are not exposed to damage need not be visually inspected until they are relocated.*

If a defect might expose students to injury, is the defective or damaged item removed from service and are students and teachers prohibited from using it until repairs and tests have been made? [29 CFR 1910.334(a)(2)(ii)]

Do flexible cords used with grounding-type equipment contain an equipment grounding conductor? [29 CFR 1910.334(a)(3)(i)]

Are only approved portable electric equipment and flexible cords used in highly conductive work locations (such as those wet with water or other conductive liquids), or in job locations where students are likely to contact water or conductive liquids? [29 CFR 1910.334(a)(4)]

***Note: Ground-fault circuit interrupters are recommended in these situations.***

Are students and teachers required to dry their hands when plugging and unplugging flexible cords and plug-connected equipment if energized equipment is involved? [29 CFR 1910.334(a)(5)(i)]

Are energized plug and receptacle connections handled only with insulating protective equipment if the connection could provide a conducting path to the student's hand (if, for example, a cord connector is wet from being immersed in water)? [29 CFR 1910.334(a)(5)(ii)]

Are locking-type connectors properly secured after connection? [29 CFR 1910.334(a)(5)(iii)]

### ***Definitions:***

**Ground-fault circuit-interrupter:** a device whose function is to interrupt the electric circuit to the load when a fault current to the ground exceeds a predetermined value that is less than that required to operate the over-current protective device of the supply circuit.

**Qualified person:** one familiar with the construction and operation of the equipment and the hazards involved. Whether a teacher or student is considered a qualified person depends on various circumstances in the workplace. A person may be considered qualified with regard to certain equipment in the workplace, but unqualified as to other equipment. A person who, in the course of on-the-job training, demonstrates an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified person is considered to be qualified for the performance of those duties.

### **Exit/Egress/Escape**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.36 and 1910.37. These regulations apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

### ***General***

Are exits provided to permit the prompt escape of occupants in case of fire or other emergency? [29 CFR 1910.36 (b)(1)]

Is every exit, way of approach, and way to travel from the exit to the street continuously maintained free of all obstructions or impediments? [29 CFR 1910.36(d)(1) and 1910.37(l)(1)]

***Note:*** The following items, if they block fire exits, are examples of violations: boxes of light tubes, empty boxes, a cart, metal fence posts, lawnmowers, steel racks, wood, tools, scales, ball racks, soccer balls, stored equipment,

*machines on the floor, and tripping hazards such as electric cords, tools, lumber, and hoses.*

Are exits maintained so as to provide free and unobstructed egress or escape when the room is occupied? [29 CFR 1910.36(b)(4)]

***Note:** No locks, chains, or fastenings to prevent free escape from the inside are permitted.*

Does every building or area have two exits if one exit could be blocked because of a fire, smoke, or other emergency? [29 CFR 1910.36(b)(8)]

Do exits discharge directly onto a street, yard, court, or other open space that gives safe access to a public way? [29 CFR 1910.37(h)(1)]

Do exit doors swing in the direction of travel when an area is occupied by more than 50 people or where hazardous operations are conducted? [29 CFR 1910.37(f)(2)]

Are all exit doors and paths of exit 28 inches or more in width? [29 CFR 1910.37(f)(6)]

***Note:** Examples of violations include a stack of wood restricting the exit to 14 inches, a space of only 17 inches between the desk and the wall, and a space of only 14 inches between desks.*

Are means of egress or exit designed and maintained to provide adequate head room, with the ceiling height at least 7-1/2 feet and any projection from the ceiling more than 6 feet 8 inches from the floor? [29 CFR 1910.37(i)]

Is every exit clearly visible and the route to it conspicuously indicated so everyone readily knows the direction of escape from any point? [29 CFR 1910.36(b)(5) and 29 CFR 1910.37(f)(4) and (l)(1)]

***Note:** Draperies or similar decorative hangings must not obstruct the view of, nor access through, any element of a means of egress or escape. Mirrors shall not be placed in or adjacent to a means of egress in any manner that may confuse the direction of egress. Exit doors must not be decorated in any way that would obscure or confuse the purpose of the door.*

In areas equipped for artificial illumination, do all exit paths have adequate and reliable illumination? [29 CFR 1910.36(b)(6)]

Are exits prohibited through bathrooms or other rooms subject to locking?

Is storage of flammable or combustible materials in exit corridors prohibited?  
[recommended]

Is the use of highly flammable furnishings or decorations prohibited? [29 CFR 1910.37(l)(2)]

## ***Exit Marking***

Is access to exits marked by readily visible signs and arrows when the way to reach it is not immediately visible? [29 CFR 1910.37(q)(1) and (5)]

Are doors, passageways or stairways that are neither exits nor a way to an exit, and which can be mistaken for an exit, marked with a sign reading "Not An Exit" or similar designation? [29 CFR 1910.36(b)(5) and 29 CFR 1910.37(q)(2)]

**Note:** Other appropriate markings would be "To Basement," "To Storeroom," "To Linen Closet," etc.

Are exit signs clearly visible, distinctive in color, and easily distinguished from decorations, interior finish, and other signs? [29 CFR 1910.37(q) (3) and (4)]

**Note:** The following are prohibited: decorations, furnishings, or equipment that impair the visibility of exit signs; and any brightly illuminated sign, display, or object in or near the line of vision of the egress sign that detracts attention from the egress sign so that it is not noticed.

Is every exit sign illuminated by a reliable light source? [29 CFR 1910.37(q)(6)]

In areas where reduction of normal illumination is permitted, are exit signs internally illuminated? [29 CFR 1910.37(q)(7)]

Does every exit sign have the word "Exit" in plainly legible letters not less than 6 inches high, with the principal strokes of letters not less than three-fourths-inch wide? [29 CFR 1910.37(q)(8)]

## **Flammable and Combustible Liquids**

**Guidelines:** This checklist covers the storage and use of flammable or combustible liquids in drums or other containers not exceeding 60 gallons individual capacity. Class I or Class II liquids in fuel tanks, as well as transient inventories of paints and varnishes, and storages exceeding 60 gallons are covered in other checklists.



Questions marked with this symbol may require the help of an outside expert.

## ***Dispensing and Use***

Are only approved pumps, drawing from the top of the storage containers, used to transfer flammable liquids?  
[29 CFR 1910.106(e)(2)(iv)(d) and 29 CFR 1926.152(e)(3 & 5)]

Are only approved self-closing valves or faucets used in gravity transfer of flammable liquids from storage containers? [29 CFR 1910.106(e)(2)(iv)(d) and 29 CFR 1926.152(e)(3)]

Is air or gas pressure prohibited for transfer of flammable or combustible liquids unless the tank, drum or containers has been approved as a pressure vessel? [29 CFR 1910.106(e)(2)(iv)(d) and NFPA 30]

Are containers and portable tanks used for flammable liquids electrically bonded or grounded during transfers? [29 CFR 1926.152(e)(2) and 29 CFR 1910.106(e)(3)(vi)]

Are leaks and spills of flammable or combustible liquids disposed of promptly and safely? [29 CFR 1926.152(f)(2)]

Are spills of flammable or combustible liquids cleaned up promptly? [29 CFR 1910.106(e)(9)(i)]

Is the use of flames or sources of ignition prohibited in areas where flammable vapors may be present? [NFPA 30]

***Note:** 29 CFR 1926.152(f)(3) requires a distance of at least 50 feet between any source of ignition and flammable liquids.*

### ***Storage and Use Quantities***

Is storage of flammable and combustible liquids limited to that required for current activities and maintenance? [NFPA 30]

Outside of approved cabinets or storage rooms, are containers of Class I liquids limited to a capacity of one gallon, or two gallons, if safety cans are used? [NFPA 30: 4-5.5.2]

Are fewer than 10 gallons of Class I and Class II liquids stored outside of an approved storage cabinet or interior storage room (except in safety cans)? [NFPA 30 4-5.5.3]

Are fewer than 25 gallons of flammable liquids stored in safety cans outside of an approved storage cabinet or interior storage room? [NFPA 30: 4-5.5.4 and 29 CFR 1926.152(b)(1)]

Are fewer than 60 gallons of Class IIIA liquids stored outside of an approved storage cabinet or interior storage room? [NFPA 30 4-5.5.5]

***Note:** OSHA under 29 CFR 1926.152(b)(1) does not permit more than 25 gallons of **combustible liquids** stored outside of an approved storage cabinet or interior storage room.*

### ***Design and Capacity of Containers***

Are only approved containers used for storing flammable or combustible liquids? [29 CFR 1910.106(d)(2)(i)]



**Note:** All gasoline must be stored in approved containers.

Are flammable and combustible liquid containers stored in accordance with the requirements of Table 1?  
[29 CFR 1910.106(d)(2)(iii)]

Table 1: Maximum Allowable Size of Containers and Portable Tanks					
Container Type*	Flammable Liquids			Combustible liquids	
	Class IA	Class IB	Class IC	Class II	Class III
Glass or approved plastic				1 gal	
Metal (other than DOT drums)	1 pt	1 pt	1 gal	5 gal	1 gal
Safety cans	1 gal	5 gal	5 gal	5 gal	5 gal
Metal drums (DOT specifications)	2 gal	5 gal	5 gal	5 gal	5 gal
Approved portable tanks	60 gal	60 gal	60 gal	60 gal	60 gal
	660 gal	660 gal	660 gal	660 gal	660 gal

\***Note:** Container exemptions: medicines, beverages, foodstuffs, cosmetics, and other common consumer items, when packaged according to commonly accepted practices.

### **Design, Construction, and Capacity of Storage Cabinets**

Is storage in cabinets restricted to not more than 60 gallons of Class I or Class II liquids and not more than 120 gallons of Class III liquids? [29 CFR 1910.106(d)(3)(i) and 29 CFR 1926.152(b)(3)]

Are all cabinets labeled in conspicuous lettering: "FLAMMABLE-KEEP FIRE AWAY"? [29 CFR 1910.106(d)(3)(ii) and 29 CFR 1926.152(b)(2)(iii)]

Are metal cabinets constructed so that the top, sides and door are at least #18 gauge sheet iron and double spaced wall with 1-1/2 inch air space? [29 CFR 1910.106(d)(3)(ii)(a)]

Is the door provided with a three point lock and a sill raised at least 2 inches above the bottom of the cabinet?  
[29 CFR 1910.106(d)(3)(ii)(a)]

Are wooden cabinets constructed so that the bottom, sides and top are of approved grade plywood at least 1 inch thick? [29 CFR 1910.106(d)(3)(ii)(b) and 29 CFR 1926.152(b)(2)(I)]

Are all wooden cabinet joints rabbetted and fastened in two directions with flat head wood screws? [29 CFR 1910.106(d)(3)(ii)(b) and 29 CFR 1926.152(b)(2)(I)]

When more than one door is used on wooden cabinets, is there a rabbetted overlap of not less than 1 inch?  
[29 CFR 1910.106(d)(3)(ii)(b) and 29 CFR 1926.152(b)(2)(I)]

Are no more than three (3) cabinets located in one fire area? [NFPA 30]

Are cabinet vents sealed unless vented to the outdoors? [NFPA 30]

### ***Design and Construction of Inside Storage Rooms***

Are openings to other rooms or buildings from flammable/combustible liquids storage rooms provided with a noncombustible liquid-tight raised sill or ramp at least 4 inches in height? [29 CFR 1910.106(d)(4)(i) and 29 CFR 1926.152(b)(4)(ii)]

**Note:** *Alternatively, the floor of the storage area shall be at least 4 inches below the surrounding floor.*

Are openings to storage rooms provided with approved self-closing fire doors?  
[29 CFR 1910.106(d)(4)(i) and  
29 CFR 1926.152(b)(4)(ii)]



Does storage in inside rooms comply with the requirements of Table 2? [29 CFR 1910.106(d)(4)(ii) and 29 CFR 1926.152(b)(4)(iv)]

<b>Table 2: Storage in Inside Rooms</b>			
Fire Protection Provided <sup>1</sup>	Fire Resistance	Maximum Size	Total Allowable Quantities <sup>2</sup>
Yes	2 hours	500 sq. ft.	10
No	2 hours	500 sq. ft.	5
Yes	1 hour	150 sq. ft.	4
No	1 hour	150 sq. ft.	2

<sup>1</sup>Fire protection system shall be sprinkler, water spray, carbon dioxide, or other system.

<sup>2</sup>(gals/sq. ft/floor area)

Is the room liquid tight where the wall joins the floor? [29 CFR 1910.106(d)(4)(i) and 29 CFR 1926.152(b)(4)(ii)]

***Note:** A permissible alternative to the sill or ramp is an open-grated trench inside the room which drains to a safe location.*



Is the electrical wiring and equipment located inside the storage room especially designed to prevent possible ignition of any released flammable vapors? [29 CFR 1910.106(d)(4)(iii) and 29 CFR 1926.152(d)(d)(v)]

***Note:** Anything which looks like normal household wiring including switches, plugs, lighting or any normal equipment such as radios are not permitted.*

Is every inside storage room provided with either a gravity or mechanical exhaust ventilation system?

[29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

Does the ventilation system have an exhaust not more than 12 inches off the floor? [29 CFR 1926.152(b)(4)(vi)]

Does the ventilation system provide for a complete change of air within the room at least six times per hour?

[29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

If a mechanical exhaust system is used, is the switch located outside of the door?

[29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

Are ventilation equipment and the lighting fixtures operated by the same switch?

[29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

When gravity ventilation is provided, are the fresh air intake as well as the exhaust outlet from the room located on the exterior of the building in which the room is located? [29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

Is there a 3 foot wide clearance in the aisle in every storage room? [29 CFR 1910.106(d)(4)(v)]

Is stacking of 30 gallon capacity containers prohibited? [29 CFR 1910.106(d)(4)(v)]

### ***General Storage Inside and Outside Buildings***

Is the storage of flammable or combustible liquids prohibited near exits, stairways, or areas normally used for the safe exit of people? [29 CFR 1910.106(d)(5)(I)]

Is the storage of flammable or combustible liquids prohibited in office areas except that required for maintenance and operation of building and operation of equipment? [29 CFR 1910.106(d)(5)(iii)]

**Note:** Permitted materials shall be stored in safety cans, in closed metal containers inside storage cabinets, or in an inside storage room that does not open into public areas of the building.

Are portable fire extinguishers available at locations where flammable or combustible liquids are stored? [29 CFR 1910.106(d)(7) and 29 CFR 1926.152(d)(1)]

**Note:** OSHA requires that at least one portable fire extinguisher having a rating of not less than 20-B units be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area located outside.

Are containers of flammable and combustible liquids closed when not in use? [29 CFR 1910.106(e)(2)(ii) and 29 CFR 1926.152(f)(1)]

Are combustible waste materials and residues kept to a minimum, stored in covered metal receptacles, and disposed of daily? [29 CFR 1910.106(e)(9)(iii)]

Are flammable and combustible liquids stored in their original container or in an approved safety can? [NFPA 30]

Unless the original container is designed to be used, are flammable or combustible liquids transferred to an approved safety can prior to use? [NFPA 30]

Are open flames and smoking prohibited in flammable or combustible liquids storage areas? [29 CFR 1910.106(d)(7)(iii)]

Are storage areas for flammable or combustible liquids kept free from combustible materials? [29 CFR 1910.106(d)(iv)]

### **Definitions:**

**Approved:** approved or listed by a nationally recognized testing laboratory.

**Class I liquids:** flammable liquids (see definition of flammable liquids).

**Class I liquids:** flammable liquids having a flash point below 73°F and a boiling point below 100°F. Typical Class IA liquids include: acetaldehyde, ethyl ether, methyl ethyl ether, pentane, and petroleum ether.

**Class IB liquids:** flammable liquids having a flash point below 73°F and having boiling points at or above 100°F. Typical Class IB liquids include: acetone, benzene, butyl acetate, denatured alcohol, ethyl alcohol, gasoline, gin (ethyl alcohol and water), heptane, hexane, isopropyl alcohol, methyl alcohol, methyl ethyl ketone, toluene, and jet fuels.

**Class IC liquids:** flammable liquids having flash points at or above 73°F and below 100°F. Typical Class IC liquids include: banana oil (isoamyl acetate), butyl alcohol, propyl alcohol, styrene, turpentine, and xylene.

**Class II liquids:** flammable liquids with flash points at or above 100°F and below 140°F. Typical Class II liquids include: diesel fuel, fuel oils, kerosene, Stoddard solvent, Anchor type car wash, and mineral spirits.

**Class III liquids:** flammable liquids with flash points at or above 140°F. Class III liquids are subdivided into two subclasses: Class IIIA liquids include those with flashpoints at or above 140°F and below 200°F, except any mixture having components with flashpoints of 200°F, or higher, the total volume of which make up 99% of more of the total volume of the mixture. Class IIIB liquids include those with flashpoints at or above 200°F. This section does not cover Class IIIB liquids.

**Class IIIA liquids:** flammable liquids with flash points at or above 140°F.

**Combustible liquid:** any liquid having a flash point at or above 100°F. Combustible liquids are known as Class II and Class III liquids.

**Flammable liquid:** any liquid having a flash point below 100°F, and have a vapor pressure not exceeding 40 psia (pounds per square inch absolute) at 100°F. Flammable liquids are known as Class I liquids and can be divided into Class IA, IB and IC.

**Flash point:** the minimum temperature in degrees Fahrenheit at which a flammable liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion.

#### **Grounds (Including Campgrounds)**

Are there any apparent signs of physical contamination: dead vegetation, noticeable stains on the ground, standing oil?

Are any chemicals or fuels handled on the grounds; were there ever?

Could activities on adjacent properties pose any environmental risks?

Do you have any underground storage tanks (UST) in use at this time?

Does your facility have any old unused USTs on the premises?

Do you store any hazardous materials in USTs?

Do you store any petroleum products in USTs?

Has your plant notified the appropriate state agency about its USTs?

Have you determined and used the proper EPA or state notification form?

Are the USTs on your premises visually inspected on a regular basis?

Have you instituted a method of release detection for your USTs?

Do you know and follow release reporting, investigation and confirmation procedures?

Do you have any areas (parking lot, excavation area, refuse area) where storm water runoff would be contaminated with hazardous pollutants?

If hazardous waste is stored on the grounds, are all hazardous waste requirements complied with?

Are there any dead branches that could break off and cause damage in the event of a strong wind?

Are there dead branches or other debris on the ground, potholes, protruding rocks or campsite indicators causing trip and fall hazards?

Is there surface water standing on the ground that requires drainage?

Is there any naturally occurring skin irritants or dermatitis-inducing agents such as Poison Ivy, Poison Oak, and Poison Sumac that should be removed?

#### **Guarding Floors, Stairs, and Other Openings**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.23. It applies to classrooms with permanent and temporary floor holes and openings greater than 1 inch in its least dimension, floor drains, manholes, hatchways, ladder openings, or pits; and raised open-sided floors, platforms, runways, or storage areas. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

Is every skylight floor opening and hole guarded by a standard skylight screen or a fixed standard railing on all exposed sides? [29 CFR 1910.23(a)(4)]

Are all floor openings to stairways, ladder ways, hatchways, chutes, or manholes guarded by a standard railing and toe-boards (on all sides except the entrance) or other protective cover? [29 CFR 1910.23(a)(1), (2), (3), (5), and (6)]

Is every temporary floor opening guarded by a standard railing or constantly attended by someone? [29 CFR 1910.23(a)(7)]

Is every floor hole into which a person could fall guarded by either a standard railing and toe-board or floor hole cover? [29 CFR 1910.23(a)(8)]

Is every floor hole into which a person could not fall (because of fixed machinery, equipment, or walls) protected by a cover that leaves no openings more than 1 inch wide? [29 CFR 1910.23(a)(9)]

***Note:** The cover must be securely held in place to prevent tools or materials from falling through.*

Where doors or gates open directly onto a stairway, does a platform allow an effective width of at least 20 inches when the door swings open? [29 CFR 1910.23(a)(10)]

Is every open-sided floor or platform that is 4 feet or more above the adjacent floor ground level guarded by a standard railing on all open sides? [29 CFR 1910.23(c)(1)]

Is every runway guarded by a standard railing on all open sides that are 4 feet or more above the floor or ground level? [29 CFR 1910.23(c)(2)]

Regardless of height, are all open-sided floors, walkways, platforms, or runways guarded with a standard railing and toe-board if they are above or adjacent to any dangerous equipment or operation? [29 CFR 1910.23(c)(3)]

Is every open-sided floor or platform that is 4 feet or more above the adjacent floor ground level guarded by a toe-board if, beneath the open sides, (a) persons can pass, (b) machinery is moving, or (c) equipment could create a hazard of falling materials? [29 CFR 1910.23(c)(1)]

Is every wall opening from which the drop is more than four feet guarded with a standard railing or other barrier? [29 CFR 1910.23(b)(1), (2) and (4)]

Is every window wall opening guarded by slats, grill work, or standard railing if (a) it is at a stairway landing, floor, platform, or balcony from which the drop is more than 4 feet, and (b) the bottom of the opening is less than 3 feet above the platform or landing? [29 CFR 1910.23(b)(3)] Is every flight of stairs with four or more risers equipped with standard stair railings or standard handrails as specified below? [29 CFR 1910.23(d)(1)]

On stairways less than 44 inches wide with both sides enclosed, at least one handrail is required, preferably on the right hand side descending.

On stairways less than 44 inches wide with one open side, at least one stair railing must be on the open side.

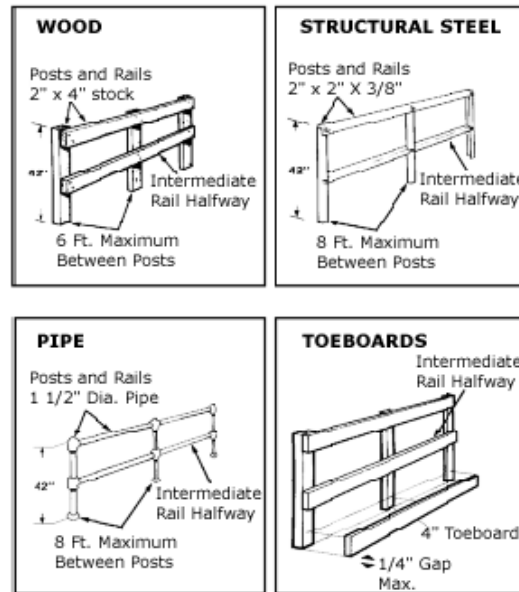
On stairways less than 44 inches wide with both sides open, one stair railing is required on each side.

On stairways more than 44 inches wide but less than 88 inches wide, one handrail on each enclosed side and one stair railing on each open side is required.

On stairways 88 or more inches wide, one handrail on each enclosed side, one stair railing on each open side, and one intermediate stair railing located approximately midway of the width is required.

Where standard railings are provided, do they meet the specifications shown in figure below? [29 CFR 1910.23(e)(1)]

**Note:** The rail must consist of a top rail at a height of 42 inches and a mid-rail at approximately 21 inches. The top rail must be smooth surfaced throughout the length of the railing.



**Proper construction and specifications for guardrails**

Are all stair railings between 30 and 34 inches from the top of the rail to the surface of the tread in line with the face of the riser at forward edge of tread? [29 CFR 1910.23(e)(2).

If wooden railings are used for guardrails, are the posts at least 2 inches by 4 inches and spaced less than 6 feet apart? [29 CFR 1910.23(e)(3)(I)]

***Note:** The top rail and intermediate rails must also be at least 2 inches by 4 inches stock.*

If pipe railings are used, are posts and top and intermediate rails at least 1-1/2 inches nominal diameter with posts spaced less than 8 feet on centers? [29 CFR 1910.23(e)(3)(ii)]

If structural steel is used for guardrails, are the posts and top and intermediate rails (a) at least 2 inches by 2 inches by 3/8 inch angle irons, or (b) other metal shapes of equivalent bending strength with posts spaced not more than 8 feet on centers? [29 CFR 1910.23(e)(3)(iii)]

Is the guardrail anchored and of such construction that it is capable of withstanding a load of at least 200 pounds applied in any direction at any point on the top rail? [29 CFR 1910.23(e)(3)(iv)]

Are standard toe-boards at least 4 inches in height provided at the floor of the guardrail? [29 CFR 1910.23(e)(4)]

Are handrails constructed so that they can be easily grasped (i.e. rounded)? [29 CFR 1910.23(e)(5)]



Are all handrails and railings provided with a clearance of at least 3 inches between the handrail or railing and any other object? [29 CFR 1910.23(e)(6)]

***Note:** A distance less than this would make it difficult to get a good grasp in an emergency.*

Are skylight screens constructed so that they are capable of withstanding a load of at least 200 pounds applied perpendicularly to any area on the screen? [29 CFR 1910.23(e)(8)]

***Note:** Sometimes people get on the roof and fall through skylight screens that are not designed to prevent this type of fall.*

Are wall opening barriers (rails, rollers, picket fences, and half doors) constructed and mounted so that the barrier is capable of withstanding a load of at least 200 pounds applied in any direction (except upward) at any point on the top rail or corresponding member? [29 CFR 1910.23(e)(9)]

### **Definitions:**

**Floor hole:** an opening measuring between 1 and 12 inches in its least dimension in any floor, platform, pavement, or yard through which materials but not persons may fall.

**Floor opening:** an opening measuring 12 inches or more in its least dimension in any floor, platform, pavement, or yard through which persons may fall.

**Runway:** a passageway for persons, elevated above the surrounding floor or ground level, such as a foot walk along shafting or a walkway between buildings.

**Wall opening:** an opening at least 30 inches high and 18 inches wide in any wall or partition through which persons may fall (such as a chute opening).

### **Hazardous Waste/Chemical Storage Areas**

Have all employees been trained to understand specific responsibilities in an emergency?

Is emergency information posted in every area where you store hazardous waste and all containers appropriately labeled with contents?

Is the necessary emergency equipment available (fire extinguishers, spill control supplies, absorbents, MSDSs)?

Do you have containers that you use to store waste temporarily (accumulate) before transport?

Does each accumulation container meet hazardous waste container requirements?

Are all solvent wastes and flammable liquids kept in fire-resistant, covered containers until they are removed from the work site?

Is each accumulation container marked with the date accumulation began and contents?

Is each container kept closed, except when adding or removing waste?

Does your storage area provide secondary containment?

Are areas where containers are stored inspected for leaks at least weekly?

Are containers holding ignitable or reactive wastes stored at least 50 feet within the facility's property line?

Is there sufficient aisle space to allow unobstructed movement of personnel and equipment?

Is each container that is being shipped marked in accordance with DOT requirements?

Is vacuuming used whenever possible rather than blowing or sweeping combustible dust?

Are firm separators placed between containers of combustibles or flammables when stacked one upon another to assure their support and stability?

Are all containers over 30 gallons stacked individually?

Are combustible scrap, debris, and waste materials (oily rags, etc.) stored in covered metal receptacles and removed from the work site promptly?

Is proper storage practiced to minimize the risk of fire including spontaneous combustion?

Are all connections on drums and combustible liquid piping, vapor and liquid tight?

Are all flammable liquids kept in closed containers when not in use (e.g. parts cleaning tanks, pans, etc.)?

Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?

Are safety cans used for dispensing flammable or combustible liquids at point of use?

Are all spills of flammable or combustible liquids cleaned up promptly?

Are storage tanks adequately vented and equipped with emergency venting?

Is smoking ban enforced in the areas involving storage and use of hazardous materials?

## **Housekeeping and General Work Environment**

Is smoking only permitted in “designated” smoking areas?

Are “no smoking” and “smoking” signs prominently posted?

Are approved covered metal containers used for oily and paint-soaked waste?

Are flammables stored in approved flammable cabinets?

Are waste receptacles provided and emptied regularly?

Are spray paint booths, dip tanks and their exhaust ducts cleaned regularly?

Is lighting in all areas adequate?

Are building exit signs operating and emergency exits clear and provided with inside opening devices?

Are floor load capacities posted in second floor lofts and storage areas?

Are floor openings protected with toe boards and railings, or a floor hole cover?

Are stairways in good condition, with standard railings provided for every flight having four or more risers?

Are portable ladders adequate for their purpose, in good condition, and provided with secure footing?

Are fused ladders equipped with side rails, cages or special safety climbing devices and in good condition?

Are aisles and passageways marked and free of obstructions?

## **Laboratories - Science**

### ***Work Habits***

Is it the policy of the facility to encourage people to never work alone in a science laboratory or storage area?

Is eating, drinking, smoking, chewing gum or tobacco banned in a science laboratory or storage room unless a designated “clean area” is provided?

Is the storage of food or beverages in the laboratory environment prohibited?

Is it a policy to never pipette by mouth?

Is washing hands before and after work in a science laboratory, and after spill cleanups required?

Are loose clothing (e.g. sleeves, full cut blouses, neckties etc.), long hair and dangling jewelry prohibited?

Is it required to tape all Dewar flasks?

Is it a policy to never leave heat sources unattended (e.g. gas burners, hot plates, heating mantles, sand baths, etc.)?

Is it required that the storage of reagents and/or apparatus be on a lab bench, and that lab shelves be kept organized?

Is it a policy to never place reactive chemicals (in bottles, beakers/flasks, wash bottles, etc.) near the edges of a lab bench?

Is a fume hood required when working with volatile substances?

Are employees instructed not to lean into the fume hood?

Is the use of the fume hood as a storage area prohibited?

Are the Material Safety Data Sheets (MSDS) for each chemical obtained and read before beginning an experiment and kept in a designated area for easy access?

Are new lab procedures analyzed in advance to determine hazardous areas?

Are accidents analyzed to prevent repeat occurrences?

Is protection provided for not only the lab worker but also the lab partner working nearby?

Is mixing and disposing of chemicals in the sink drain prohibited?

Are co-workers always informed of plans to carry out hazardous work?

In order to allow meaningful retrospective contamination studies, is a record kept of who worked with what, when, and how long?

Are regular in-house safety and health inspections performed with an emphasis on improvement rather than guilt?

Are lab occupants informed in regard to the alarm bell and what to do if it sounds?

Does your facility conduct regular fire or emergency drill with critical reviews of the results?

Have all employees been trained to understand specific responsibilities in an emergency?

Is there a established procedure in case of an emergency (e.g. what devices should be turned off, which escape route to use, a personnel meeting place outside the building, a person designated to authorize re-entry into the building)?

Have lab personnel received current training in first aid, CPR, etc?

### ***Safety Wear***

Is American National Standards Institute (ANSI) or equivalent standard approved eye or face protection worn continuously?

Are employees required to wear gloves which will resist penetration by the chemical being handled and which have been checked for pin holes, tears, or rips?

Are personnel required to wear a laboratory coat or apron to protect skin and clothing from chemicals?

Must employees wear footwear that covers the feet completely - no open-toe shoes?

### ***Facilities and Equipment***

Are separate containers for trash and broken glass required?

Are emergency response procedures indicated in the facility plan?

Have all employees been trained to understand specific responsibilities in an emergency?

Are emergency routes designated and posted in work areas?

Are all escape routes, and alternate escape routes monitored to ensure they are not obstructed?

Are fire doors monitored to ensure that they are not blocked open?

Is it a facility policy to never store materials in lab or in aisles?

Do all moving belts and pulleys have safety guards?

Are lab personnel instructed in the proper use of the eyewash fountain, emphasizing rolling of the eyeballs, and turning eyelids “inside-out”?

Are eyewash fountains installed which supply at least 15 minutes of water flow?

Are safety showers and eyewash fountains regularly inspected and documented?

Does your facility sample breathing air space for measurement of possible contaminants, and document the report?

Are fire blankets regularly inspected for rips and holes and keep good records of the inspections?

Are current emergency phone numbers posted next to the phone?

Are fire extinguishers placed near an escape route, not in a “dead end”?

Does your facility regularly maintain fire extinguishers, maintain records, and train personnel in the proper use of extinguishers?

Are personnel familiarized with the meaning of “Class A fire”, “Class B fire”, etc., and how they relate to fire extinguisher use?

Are hoods regularly checked for proper draft and ensure that exhaust air from an external hood vent is not redrawn into room air?

Are all compressed gas cylinders secured when in use and while being transported?

Does your facility have installed chemical storage shelves with lips (never use stacked boxes in lieu of shelves)?

Is it required that your lab use only an explosion-proof refrigerator for lab storage?

Does your facility have appropriate equipment and materials available for spill control and replaced when it becomes out dated?

### **Material Handling**

Is there safe clearance for equipment through aisles and doorways?

Are aisle-ways designated, permanently marked, and kept clear to allow unhindered passage?

Are motorized vehicles and mechanized equipment inspected daily or prior to use?

Are vehicles shut off and breaks set prior to loading or unloading?

Are containers of combustible or flammables, when stacked while being moved, always separated by dunnage sufficient to provide stability?

Are dock boards (bridge plates) used when loading or unloading operations are taking place between vehicles and docks?

Are trucks and trailers secured from movement during loading and unloading operations?

Are dock plates and loading ramps constructed and maintained with sufficient strength to support imposed loading?

Are hand trucks maintained in safe operating condition?

Are chutes equipped with sideboards of sufficient height to prevent the materials being handled from falling off?

Are chutes and gravity roller sections firmly placed or secured to prevent displacement?

At the delivery end of the rollers or chutes, are provisions made to brake the movement of the handled materials?

Are pallets usually inspected before being loaded or moved?

Are hooks with safety latches or other arrangements used when hoisting materials so that slings or load attachments won't accidentally slip off the hoist hooks?

Are securing chains, ropes, chocks, or slings adequate for the job to be performed?

When hoisting material or equipment, are provisions made to assure no one will be passing under the suspended loads?

Are material safety data sheets available to employees handling hazardous substances?

#### **Piping Systems Identification**

When non-potable water is piped through a facility, are outlets or taps posted to alert employees that it is unsafe and not to be used for drinking, washing or other personal use?

When hazardous substances are transported through above ground piping, is each pipeline identified at points where confusion could introduce hazards to employees?

When pipelines are identified by color painting, are all visible parts of the line so identified?

When pipelines are identified by color painted bands or tapes, are the bands or tapes located at reasonable intervals and at each outlet, valve or connection?

When pipelines are identified by color is the color code posted at all locations where confusion could introduce hazards to employees?

When the contents of pipelines are identified by name or name abbreviation, is the information readily visible on the pipe near each valve or outlet?

When pipelines carrying hazardous substances are identified by tags, are the tags constructed of durable materials, the message carried clearly and permanently distinguishable and are tags installed at each valve or outlet?

When pipelines are heated by electricity, steam or other external source, are suitable warning signs or tags placed at unions, valves, or other serviceable parts of the system?

#### **Sidewalks**

Are proper standards used when designing or modifying a sidewalk?

Is there a standard established to inspect sidewalks for defects and the type, size/severity, and locations:

- blow-up;
- depression;
- cracking;
- gaps;
- faulting;
- tilting;
- separating;
- scaling;
- swelling;
- risers and drop-offs;

improper drainage, etc.?

Are sidewalks routinely inspected for obstructions:

- vehicles;
- tree limbs;
- dirt/debris;
- vegetation, etc.?

Are bridges provided over permanent hazards that cannot be bypassed?

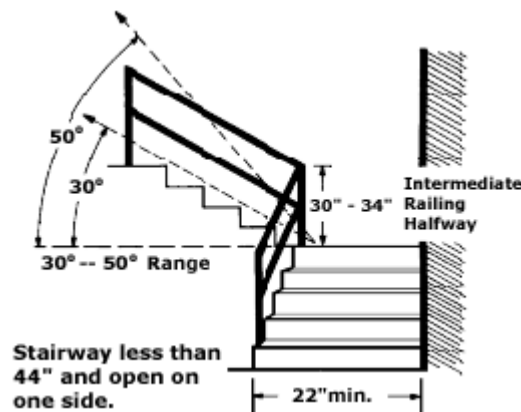
Are the deficiencies documented and repaired?

## Stairs (Fixed)

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.24. It applies to interior and exterior stairs around machinery, tanks, and other equipment, and stairs leading to or from floors, platforms, or pits. It does not apply to stairs used for fire exit purposes. It also does not address fixed stairs associated with construction sites. Consult the OSHA regulations 29 CFR 1926.1051 and 1926.1052 for construction site requirements. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

Are fixed stairs (rather than ladders or other means of access) provided where access to elevation is necessary on a daily or regular basis? [29 CFR 1910.24(b)]

Do fixed stairs have a minimum width of 22 inches? [29 CFR 1910.24(d)] (see Figure)



Are fixed stairs installed at angles to the horizontal between 30° and 50°? [29 CFR 1910.24(e)] (see previous Figure)



Are all treads reasonably slip-resistant with the front protruding edge of the tread of a non-slip finish? [29 CFR 1910.24(f)]

Do fixed stairs have a uniform rise height and tread width throughout the flight of stairs? [29 CFR 1910.24(f)]

Are stairway landing platforms no less than the width of the stairway and a minimum of 30 inches long measured in the direction of travel? [29 CFR 1910.24(g)]

Are standard railings provided on all open sides of exposed stairways and stair platforms? [29 CFR 1910.24(h)] (see checklist **Guarding Floors, Stairs, and Other Openings**)

Is a vertical clearance above the stair tread to an overhead obstruction that is at least 7 feet measured from the leading edge of the tread? [29 CFR 1910.24(i)]

#### **Vehicle Maintenance Area**

Are correct lockout/tag out procedures in use?

Is compressed air for cleaning less than 30 psi?

Are storage cabinets used to hold flammable liquids, labeled “Flammable – Keep Fire Away?”

Are flammable liquids, such as gasoline, kept in a safety can?

If carbon monoxide is present, due to forklifts, heaters or idling vehicles, are signs posted warning of its presence?

Is all machinery and equipment kept clean and properly maintained?

Is protective clothing and equipment provided and used when cleaning up spilled toxic or otherwise hazardous materials or liquids?

Are work surfaces kept dry or appropriate means taken to assure the surfaces are slip-resistant?

Are all spilled materials or liquids cleaned up immediately?

Do you have emergency eye wash and shower facilities within the work area where employees are exposed to injurious corrosive materials?

Is it prohibited to fuel an internal combustion engine with a flammable liquid while the engine is running?

Are fueling operations done in such a manner that likelihood of spillage will be minimal?

When spillage occurs during fueling operations is the spilled fuel washed away completely, evaporated, or other measures taken to control vapors before restarting the engine?

Are batteries charged in a properly vented room?

Is smoking ban enforced?

Are facilities provided for flushing spilled electrolyte?

Do you prevent open flames, sparks in immediate area?

Is required personal protective equipment used?

Are eye wash fountains and safety showers provided in areas where corrosive chemicals are handled?

Is it prohibited to fuel an internal combustion engine with a flammable liquid while the engine is running?

Are fueling operations done in such a manner that likelihood of spillage will be minimal?

When spillage occurs during fueling operations is the spilled fuel washed away completely, evaporated, or other measures taken to control vapors before restarting the engine?

Are fuel caps replaced and secured before starting the engine?

In fueling operations, is the proper grounding maintained between the container and the fuel tank?

Are fueling hoses of a type designed to handle the specific type of fuel?

Is it prohibited to handle or transfer gasoline in open containers?

Are open lights, open flames, or sparking, or arcing equipment prohibited near fueling or transfer of fuel operations?

Is smoking prohibited in the vicinity of fueling operations?

Are fueling operations prohibited in building or other enclosed areas that are not specifically ventilated for this purpose?

Where fueling or transfer of fuel is done through a gravity flow system, are the nozzles of the self-closing type?

Where tires are mounted and/or inflated on drop center wheels, is a safe practice procedure posted and enforced?

Where tires are mounted and/or inflated on wheels with split rims and/or retainer rings, is a safe practice procedure posted and enforced?

Does each tire inflation hose have a clip-on chuck with at least 24 inches of hose between the chuck and an in-line hand valve and gauge?

Does the tire inflation control valve automatically shutoff the airflow when the valve is released?

Is a tire-restraining device such as a cage, rack or other effective means used while inflating tires mounted on split rims, or rims using retainer rings?

Are employees strictly forbidden from taking a position directly over or in front of a tire while it is being inflated?

#### **Waterfront Facilities**

##### ***Warning Signs and Bulletin Boards***

Are signs posted relative to waterfront safety (warnings, rules, regulations, etc.)?

Are signs and bulletin boards located so they will be seen by all using the facilities before they enter the area?

Where life guards are not provided are there signs denoting this placed at obvious points along the swimming area?

##### ***Parking Lots***

Are parking lots free of hazardous breakup, damage and debris?

Are dead tree limbs trimmed?

Are parking barriers in good repair and properly placed?

Are parking lots included in the inspection program?

##### ***Sidewalks (also see “SIDEWALKS” checklist section)***

Are sidewalks free of hazardous cracks, break-up, damages and debris?

Are sidewalks surfaces have non-slip characteristics?

Are sidewalks included in the inspection program?

##### ***Steps and Stairs (also see “STAIRS AND STAIRWAYS” checklist section)***

Are steps and stairs free of hazardous cracks, break-up, damages and debris?

Are stairs and stairways surfaces non-slip in character?

Are handrails in place and in good repair where appropriate?

Are steps and stairs included in the inspection program?

##### ***Zoned Swimming Beaches***

Where life guards are not provided are there signs denoting this placed at obvious points along the swimming area?

Are beaches free of hazardous debris?

Are swimming areas inspected on a regular basis for underwater hazards and removed where feasible?

Are appropriate warning signs in place?

Are dead tree limbs trimmed and removed?

Are zoned swimming beaches included in the inspection program?

### ***Playground Slides in Water***

Does slide meet U.S. Consumer Product Safety Guidelines?

Has slide been installed in accordance with manufacture's instructions?

Is the slide included in the inspection program?

### ***Regulatory signs, markers, buoys, and other warning or marking devices***

Are all regulatory signs, markers, buoys, and warning or marking devices placed, marked and meet specification in accordance with North Dakota Administrative Rule 30-05-01-07 and N.D.C.C. 20.1-13-12 and 20.1-13-14?

Are these devices in serviceable condition?

Are these devices included in the inspection program?

### ***Boat Docks***

Have all missing, broken, weak or rotting deck, and structural lumber been replaced?

If planking is used, are gaps between planks less than ½ inch after shrinkage?

Are all frames, anchors, and supports solid and stable?

Are all floats securely attached?

Have loose fasteners, protruding nails, screws, or bolts repaired?

Have exposed open ends of upright stand supporters been covered?

Have any gaps over one inch between dock sections been covered?

Have pull cables on slide-in docks retracted as far as possible?

Are appropriate warning signs in place?

Is a slip free surface maintained on all decking (especially when wet)?

Is all wood material in the structure and decking pressure treated with a preservative?

Do docks have adequate and approved-type floatation material (material which will not become waterlogged or sink when punctured)?

Do docks/slip fingers exceed the minimum freeboard (6 inches above water level)?

Does the substructure have any broken, rusted, or missing members?

Is the access bridge between the shore and the dock stable, slip free and wide enough to permit safe pedestrian passage?

Are all handrails structurally sound and in safe, well-maintained condition?

Does the roof and roof superstructures have any broken, rusted or missing members?

Is there one Coast Guard approved throw-type floatation device with 60 feet of 3/8-inch diameter rope attached or a reach pole on each main walkway or every 200 feet?

When constructing new facilities or alteration of existing facilities, are they barrier free and usable by persons with disabilities as stated in Title II of the ADA Section 504?

Are boat docks included in the inspection program?

### ***Boat Ramps***

Have damaged surfaces been repaired?

Are boat ramps clear of excess debris?

Has the boat ramp area been checked for underwater hazards and removed where feasible?

Are appropriate warning signs in place?

Are boat ramps included in the inspection program?

### ***Change houses/Bathhouses/Comfort Stations***

Have loose or deteriorating lumber, protruding nails or fasteners, loose shingles and other structural damages repaired?

Are floors free on hazardous cracks?

Have hot water heaters and mixing valves been adjusted properly?

Are automatic door closures properly adjusted to prevent slamming?

Are Ground Fault Circuit Interrupters (GFCI) breakers or receptacles installed?

Are all indoor, outdoor, and security lighting operational?

Are all fixtures in good repair?

Are all well pipes/casings, septic system covers, cistern covers and other above-ground fixtures secured and landscaped or marked to make visible if near areas of foot traffic?

Are change houses/bathhouses/comfort stations included in the inspection program?

### ***Facilities for Accessibility of Disabled Persons***

Are standard facilities for disabled persons provided at comfort stations and pedestrian access points?

Can disabled persons easily gain access to the waterfront facilities?

Is accessibility of disabled persons to the facilities included in the inspection program?

### ***Miscellaneous structures and equipment on beaches***

Inspect the following to ensure that all are in good state of repair, functioning properly and properly placed, secured or anchored when applicable:

- individual picnic shelters;
- permanent beach play equipment (see “PLAYGROUND” checklist section);
- benches;
- fire-grates;
- picnic tables;
- dumpsters;
- traffic, directional and informational signs;
- rip rap;
- security lighting;
- lifesaving stations;
- retaining walls.

Are these miscellaneous structures and equipment included in the inspection program?

### ***Fish Cleaning Stations***

Are fish cleaning stations installed in accordance with manufacturers’ instructions?

Are instructions for use and appropriate warnings posted?

Are all guards in place?

Is all equipment functioning properly and in clean condition?

What was the date of the last inspection?

## **EQUIPMENT INSPECTIONS**

### **Compressed Gases**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, OSHA under the General Industry standard 29 CFR 1910.101. It applies to the handling, storage, and use of compressed gases in cylinders or portable tanks. The regulations cited apply only to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees.

The OSHA standard adopts by reference the Compressed Gas Association's (CGA) Pamphlets C-6-1986, C-8-1962, and P-1-1965. The following questions relate to the more common precautions to be taken in school environments. The checklist, however, is not all inclusive. The Compressed Gas Association has updated the three pamphlets cited by OSHA as C-6-1993, C-8-1997, and P-1-1999.

Are cylinders stored in upright positions and immobilized by chains or other means to prevent them from being knocked over? [CGA 3.4.4 and 29 CFR 1910.101(b)]

***Note:** Tragic accidents have occurred when a cylinder was knocked over, damaging the cylinder and turning it into a rocket.*

Are cylinders stored away from highly flammable substances such as oil, gasoline, or waste? [CGA 3.3.6]

Are flammable gases separated from oxidizing gases in storage areas? [CGA 3.3.3]

***Note:** Acetylene and propane cylinders should be separated from oxygen cylinders when not in use.*

Are oxygen and fuel gas cylinders separated by a minimum of 20 feet when in storage? [CGA 3.5.3]

***Note:** A fire-resistant partition between the cylinders can also be used.*

Are storage rooms for cylinders dry, cool, and well-ventilated? [CGA 3.3.5]

***Note:** The storage rooms should be fire resistant and the storage should not be in subsurface locations. Cylinders should be stored in secure areas at temperatures below 125°F, away from radiators or other sources of heat.*

Are cylinders stored away from incompatibles, excessive heat, continuous dampness, salt or other corrosive chemicals, and any areas that may subject them to damage? [CGA 3.3.7 and 29 CFR 1910.101(b)]

***Note:** Rusting will damage the cylinder and may cause the valve protection cap to stick.*

Is the storage area permanently posted with the names of the gases stored in the cylinders? [CGA 3.3.2 and 29 CFR 1910.101(b)]

Do all compressed gas cylinders have their contents and precautionary labeling clearly marked on their exteriors? [29 CFR 1910.101(b)]

Are all compressed gas cylinder valve covers in place when cylinders are not in use? [29 CFR 1910.101(b)]

Are all compressed gas cylinders stored so they do not interfere with exit paths? [29 CFR 1910.101(b)]

Are all compressed gas cylinders subjected to periodic hydrostatic testing and interior inspection? [29 CFR 1910.101(a)]

***Note:** This is normally done by the supplier.*

Do all compressed gas cylinders have safety pressure relief valves? [29 CFR 1910.101(c)]

Are cylinders always maintained at temperatures below 125°F? [CGA 3.1.12]

***Note:** A flame should never come in contact with any part of a compressed gas cylinder.*

Are safety relief devices in the valve or on the cylinder free from any indication of tampering? [CGA 3.1.14]

Is repair or alteration to the cylinder, valve, or safety relief devices prohibited? [CGA 3.1.15]

***Note:** All alterations and repairs to the cylinder and valve must be made by the compressed gas vendor. Modification of safety relief devices beyond the tank or regulator should only be made by a competent person appointed by management.*

Is painting cylinders without authorization by the owner prohibited? [CGA 3.1.20]

***Note:** Often color codes are used to help designate cylinders. Arbitrary paint is not recommended.*

Are charged or full cylinders labeled and stored away from empty cylinders? [CGA 3.3.4 and 29 CFR 1910.101(b)]

Is the bottom of the cylinder protected from the ground to prevent rusting? [CGA 3.3.9]

Are all compressed gas cylinders regularly inspected for corrosion, pitting, cuts, gouges, digs, bulges, neck defects and general distortion? [29 CFR 1910.101(a)]



Are cylinder valves closed at all times, except when the valve is in use? [CGA 3.1.15]

***Note:** Regulator diaphragms have failed, and unwanted gas was delivered to an area or apparatus, causing safety and health problems.*

Are compressed gas cylinders always moved, even short distances, by a suitable hand truck? [CGA 3.2.6]

***Note:** They must never be dragged across the floor. Serious accidents have occurred when a cylinder with a regulator in place was improperly moved. The cylinder fell, causing the regulator to shear off, and the cylinder rocketed through several brick walls.*

Is using wrenches or other tools for opening and closing valves prohibited? [CGA 3.4.9]

***Note:** Hammering on valve wheels to open them should be strictly prohibited. For valves that are hard to open, contact the supplier for instruction.*

Are suitable pressure regulating devices in use whenever the gas is emitted to systems with pressure-rated limitations lower than the cylinder pressure? [CGA 3.4.5]

Are all compressed gas cylinder connections such as pressure regulators, manifolds, hoses, gauges, and relief valves checked for integrity and tightness? [29 CFR 1910.101(a)]

Are all compressed gas cylinders regularly subjected to leak detection using an approved leak detecting liquid?

Is an approved leak-detection liquid used to detect flammable gas leaks? [CGA 3.5.2]

***Note:** A flame should **never** be used.*

Are procedures established for when a compressed gas cylinder leak cannot be remedied by simply tightening the valve? [CGA 3.1.6] The procedures should include the following:

Attach tag to the cylinder stating it is unserviceable.

Remove cylinder to a well ventilated out of doors location.

If the gas is flammable or toxic, place an appropriate sign at the cylinder warning of these hazards.

Notify the gas supplier and follow his/her instructions as to the return of the cylinder.

Are students/employees prohibited from using compressed gases (air) to clean clothing or work surfaces? [29 CFR 1910.101(b)]

Are compressed gases only handled by experienced and properly trained people? [CGA 3.4.1]

#### **Compressors/Compressed Air**

Are compressors equipped with pressure relief valves, and pressure gauges?

Are compressor air intakes installed and equipped to ensure that only clean uncontaminated air enters the compressor?

Are air filters installed on the compressor intake?

Are compressors operated and lubricated in accordance with the manufacture's recommendations?

Are safety devices on compressed air systems checked frequently?

Before any repair work is done on the pressure system of a compressor, is the pressure bled off and the system locked-out?

Are signs posted to warn of automatic starting feature of the compressor?

Is the belt drive system totally enclosed to provide protection for the front, back, top, and sides?

Is it strictly prohibited to direct compressed air towards a person?

Are employees prohibited from using highly compressed air for cleaning purposes?

If compressed air is used for cleaning off clothing, is the pressure reduced to less than 10-psi?

When using compressed air for cleaning, do employees wear protective clothing and personal protective equipment?

Are safety chains or other suitable locking devices used at couplings of high-pressure hose lines where a connection failure would create a hazard?

Before compressed air is used to empty containers of liquid, is the safe working pressure of the container checked?

When compressed air is used with abrasive blast cleaning equipment, is the operating valve a type that must be held open manually?

When compressed air is used to inflate auto tires, is a clip-on chuck and an in-line regulator preset to 40 psi required?

Is it prohibited to use compressed air to clean up or move combustible dust if such action could cause the dust to be suspended in the air and cause a fire or explosion hazard?

Is every receiver equipped with a pressure gauge and with one or more automatic, spring-loaded safety valves?

Is the total relieving capacity of the safety valve capable of preventing pressure in the receiver from exceeding the maximum allowable working pressure of the receiver by more than 10 percent?

Is every air receiver provided with a drainpipe and valve at the lowest point for the removal of accumulated oil and water?

Are compressed air receivers periodically drained of moisture and oil?

Are all safety valves tested frequently and at regular intervals to determine whether they are in good operating condition?

Is the inlet of air receivers and piping systems kept free of accumulated oil and carbonaceous materials?

#### **Fall Protection**

Are supervisors required to monitor and enforce the use of written fall protection procedures?

Do workers know they are responsible to know and follow fall protection procedures?

If standard fall protection is not feasible, are all workers required to tie off with a full body harness and shock-absorbing lanyard equipped with double locking snaps?

Is the use of body belts as part of a personal fall arrest system prohibited?

Are only locking type snap-hooks permitted for use in personal fall arrest systems and positioning systems?

Is it required that the lanyard must be attached to the D-ring in the center of the back and to a structural member capable of supporting a 5,000-pound load in the event of a fall?

Are tie off points required to be above the head as high as possible?

Is it required that lanyards can be no longer than six feet?

Are employees working from swing scaffolds, boatswain chairs, spider baskets, etc., required to be tied off to an independent lifeline which is securely attached to a structural member?

Is each worker required to have a separate lifeline to themselves?

Is it required that employees working near electrical equipment use nylon or other non-conductive lanyards (steel slings prohibited)?

Are all fall protection equipment protected from damage and kept in good repair?

Is any equipment subject to a fall (in-service loading) immediately removed from service?

Are all employees that are exposed to fall hazards trained in fall protection procedures, held accountable for compliance, and the training documented?

***Is fall protection utilized at the following heights:***

Commercial roofing – six feet or higher?

Residential roofing – 25 feet or higher?

General Industry – four feet or higher?

Grain handling facilities – six feet or higher where feasible?

Steel erection – 25 feet or higher?

Scaffolds - 10 feet or higher?

When scaffold is less than 45 inches – six feet or higher?

Fixed ladders – 25 feet or higher?

**Fire Protection for Cooking Areas**

**Guidelines:** This checklist covers selected regulations from the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) General Industry standards 29 CFR 1910.160. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Recommendations from the National Fire Protection Agency (NFPA) standards have also been included. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA and U.S. Environmental Protection Agency (EPA) standard, or with a non regulatory recommendation.

Is cooking equipment that produces smoke or grease-laden vapors equipped with an exhaust system? [NFPA 96]

Is the exhaust system in operation during all periods of cooking? [NFPA 1]

Are all interior surfaces of the exhaust system reasonably accessible for cleaning and inspection? [NFPA 96]

Are kitchen exhaust systems cleaned to bare metal at frequent intervals to prevent surfaces from becoming heavily contaminated with grease or oily sludge?  
[NFPA 96]

***Note:** Thorough cleaning of ducts, hoods, and fans shall require scraping, brushing, or other positive cleaning methods.*

Is an approved fixed automatic fire suppression system installed in all hoods and connecting hood and duct systems? Does it provide surface protection for all cooking appliances and equipment that may be a source of ignition in or under the hood? [NFPA 1 and 96]

Is the fixed automatic fire suppression system inspected at least annually and whenever the system is inoperative? [29 CFR 1910.160(b)(2) and (b)(6)]

Are fixed automatic fire suppression system inspections made only by properly trained and qualified personnel? [29 CFR 1910.160(b)(2) and (b)(6)]

Are all fusible links and fusible link sprinkler heads replaced annually? [NFPA 1]

Is at least one manual station provided for the discharge activation of each fixed extinguishing system? [29 CFR 1910.160(b)(15)]

Does the extinguishing system automatically shut off all sources of fuels and heat to all equipment requiring protection by that extinguishing system? [NFPA 1]

Does the activation of an automatic extinguishing system activate an audible alarm or visual indicator that shows that the system has been activated? [NFPA 96]

Are instructions for manually operating the extinguishing system posted conspicuously in the kitchen and reviewed periodically with the employees? [NFPA 1]

Is operation of cooking equipment prohibited when the extinguishing system or exhaust system is non operational or otherwise impaired? [NFPA 1]

Is at least one portable fire extinguisher available with a minimum of a 40-B rated sodium bicarbonate or potassium bicarbonate dry-chemical extinguisher or a K-type fire extinguisher? [NFPA 10]

Is the portable fire extinguisher located not more than 30 feet from the cooking area? [NFPA 10]

**Forklifts - Industrial Trucks (also see Material Handling)**

Are only employees who have been trained in the proper use of hoists allowed to operate them?

Is operator training documented?

Are only trained personnel allowed to operate industrial trucks?

Is substantial overhead protective equipment provided on high lift rider equipment?

Is use of hard hats and appropriate foot protection required?

Are your forklifts, motorized vehicles and mechanized equipment inspected daily or prior to use?

Are all industrial trucks not in safe operating condition removed from service?

Are repairs to fuel and ignition systems conducted only in areas specifically designed for them?

Is it prohibited to fuel an internal combustion engine with a flammable liquid while the engine is running?

Are fueling operations done in such a manner that likelihood of spillage will be minimal?

When spillage occurs during fueling operations is the spilled fuel washed away completely, evaporated or other measures taken to control vapors before restarting the engine?

Are the required lift trucks operating rules posted and enforced?

Is directional lighting provided on each industrial truck that operates in an area with less than 2-foot candles per square foot of generated lighting?

Does each industrial truck have a warning horn, whistle, gong, or other device which can clearly be heard above the normal noise in the areas where operated?

Are the brakes on each industrial truck capable of bringing the vehicle to a complete and safe stop when fully loaded?

Will the industrial truck's parking brake effectively prevent the vehicle from moving when unattended?

Are trucks shut off and breaks set prior to loading or unloading?

Are containers stored, stacked, blocked and limited in height so they are stable and secure?

Are dock boards (bridge plates) used when loading or unloading operations are taking place between vehicles and docks?

Are trucks and trailers secured from movement during loading and unloading?

Are industrial trucks operating in areas where flammable gases or vapors, or combustible dust or ignitable fibers may be present in the atmosphere, approved for such locations?

Are motorized and hand/rider safety mechanism designed so that the brakes are applied, and power to drive the motor shuts off when the operator releases his or her grip on the device that controls the travel?

Are industrial trucks with internal combustion engine, operated in buildings or enclosed areas, carefully checked to ensure operations do not cause harmful concentration of dangerous gases or fumes?

## **Grinders (Abrasive Wheel Machinery and Tools)**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.215 and 1910.243 and the construction standards 29 CFR 1926.303. It applies to fixed and portable abrasive wheel machinery. Natural sandstone wheels and metal, wooden, cloth, or paper discs, with a layer of abrasive on the surface are not covered by this checklist. **This checklist must be used in conjunction with the Machines--General Requirements checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. An answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a non-regulatory recommendation.

This checklist does not address extensive specifications for design of guards and flanges included in 29 CFR 1910.215. Consult the OSHA regulations for additional details.

### ***General Requirements***

Do grinding wheels fit freely on the spindle? [29 CFR 1910.215(d)(2); 1910.243(c)(5)(ii) and 1926.303(c)(8)]

Is forcing the grinding wheel on the spindle prohibited? [29 CFR 1926.303(c)(8)]

Is the spindle nut tightened only enough to hold the wheel in place? [29 CFR 1926.303(c)(8)]

Are all abrasive wheel operators required to use eye protection? [29 CFR 1926.303(c)(9)]

Are all grinding machines equipped with sufficient power to maintain the spindle speed at safe levels under all conditions of normal operation? [29 CFR 1926.303(a)]

Are all contact surfaces of the wheel, blotters, and flanges flat and free of foreign material? [29 CFR 1910.215(d)(3) and 1920.243(c)(5)(iii)]

When a bushing is used in the wheel hole, is it positioned so it does not exceed the width of the wheel nor make contact with the flange? [29 CFR 1910.215(d)(4)]

### ***Floor and Bench-Grinding Machines***

Are all floor- and bench-mounted abrasive wheels equipped with safety guards? [29 CFR 1910.215(a)(1) and 1926.303(a)]

Does the safety guard cover the spindle end, nut, and flange projections? [29 CFR 1910.215(a)(2)]

Is the maximum angular exposure of the grinding wheel and sides 90° or less? [29 CFR 1910.215(b)(3) and 1926.303(c)(1)]

***EXCEPTION:*** When work requires contact with the wheel below the horizontal plane of the spindle, the angular exposure shall not exceed 125°. In either case, the exposure shall begin at not more than 65° above the horizontal plane of the spindle.

Are work rests provided that are rigidly supported and readily adjustable? [29 CFR 1910.215(a) (4) and 1926.303(c)(2)]

Are work rests kept adjusted closely to the wheel with a maximum opening of 1/8 inch to prevent the work from being jammed between the wheel and the rest? [29 CFR 1910.215(a)(4) and 1926.303(c)(2)]

### ***Portable and Other Abrasive Wheels***

Do all machines with abrasive wheels greater than 2 inches in diameter have safety guards? [29 CFR 1910.243(c)(1)]

***Note:*** Some abrasive wheels may be equipped with flanges.

Is the maximum exposure angle on all grinding wheels 180° or less? [29 CFR 1910.243(c)(3) and (4) and 1926.303(c)(5)]

When in use, is the guard on right angle head or vertical portable grinders located between the operator and the wheel? [29 CFR 1910.243(c)(3)]

Is the guard on right angle head or vertical portable grinders adjusted so that pieces of a broken wheel will be deflected away from the operator? [29 CFR 1910.243(c)(3)]

Is the top half of the wheel on other grinders always enclosed? [29 CFR 1910.243(c)(4)]

### ***General Requirements for Guards***

Are the guard and its fastenings strong enough to retain fragments of the wheel in case of breakage? [29 CFR 1926.303(c)(5)]

Are guards mounted to maintain proper alignment with the wheel? [29 CFR 1910.243(c)(ii) and 1926.303(c)(5)]

Are tongue guards at the top of the wheel of bench, floor stand, and cylindrical grinders adjusted to the decreasing diameter of the wheel so that the gap is never more than one-fourth (1/4) of an inch? [29 CFR 1910.215(b)(9)]

### ***Hoist and Auxiliary Equipment***

Is each overhead electric hoist equipped with a limit device to stop the hook travel at its highest and lowest point of safe travel?



Will each hoist automatically stop and hold any load up to 125 percent of its rated load, if its actuating force is removed?

Is the rated load of each hoist legibly marked and visible to the operator?

Are stops provided at the safe limits of travel for trolley hoist?

Are the controls of hoist plainly marked to indicate the direction of travel or motion?

Is each cage-controlled hoist equipped with an effective warning device?

Are close-fitting guards or other suitable devices installed on hoist to assure hoist ropes will be maintained in the sheave grooves?

Are all hoist chains or ropes of sufficient length to handle the full range of movement of the application while still maintaining two full wraps on the drum at all times?

Are nip points or contact points between hoist ropes and sheaves which are permanently located within seven feet of the floor, ground or working platform, guarded?

Is it prohibited to use chains or rope slings that are kinked or twisted?

Is it prohibited to use the hoist rope or chain wrapped around the load as a substitute, for a sling?

Have slings been inspected and the inspection documented?

Is the operator instructed to avoid carrying loads over people?

#### **Lock-Out Tag-Out Procedures**

Is all machinery or equipment capable of movement, required to be de-energized or disengaged and blocked or locked out during cleaning, servicing, adjusting or setting up operations, whenever required?

Where the power disconnecting means for the equipment does not also disconnect the electrical control circuit?

Are the appropriate electrical enclosures identified?

Is a means provided to assure the control circuit can also be disconnected and locked out?

Is the locking out of control circuits in lieu of locking out main power disconnects prohibited?

Are all equipment control valve handles provided with a means for locking out?

Does the lock out procedure require that stored energy (mechanical, hydraulic, air, etc.) be released or blocked before equipment is locked out for repairs?

Are appropriate employees provided with individually keyed personal safety locks?

Are employees required to keep personal control of their key(s) while they have safety locks in use?

If there is a master key, is access to it limited?

Is it required that only the employee exposed to the hazard place may remove the safety lock?

Is it required that employees check the safety of the lock out by attempting a start up after making sure no one is exposed?

Are employees instructed to always push the control circuit stop button prior to re-engaging the main power switch?

Is there a means provided to identify any or all employees who are working in locked-out equipment by their locks or accompanying tags?

Are sufficient number of accident preventative signs or tags and safety padlocks provided for any reasonable foreseeable repair emergency?

When machine operations, configuration or size requires the operator to leave his or her control station to install tools or perform other operations, and that part of the machine could move if accidentally activated, is such element required to be separately locked or blocked out?

In the event that equipment or lines cannot be shut down, locked-out and tagged, is a safe procedure established and rigidly followed?

#### **Machines General Requirements**

**Guidelines:** This checklist covers machines which require guards to protect the operators and others near the machines from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are barrier guards, two-hand tripping devices, and electronic safety devices.



Questions marked with this symbol may require the help of an outside expert.

Are all machines guarded to protect the operator and other people in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips, and sparks? [29 CFR 1910.212(a)(1)]

Is the point of operation guarded, in conformity with appropriate standards, if operation of machinery exposes individuals to injury? [29 CFR 1910.212(a)(3)(ii)]

***Note:** In the absence of applicable specific standards, guarding shall be so designed and constructed as to prevent the operator from having any part of his/her body in*

*the danger zone during the operating cycle. Examples of cited violations include: paper cutters had no finger guards, a radial arm saw's blade protruded beyond the edge of the cutting table during its operating cycle, bench and pedestal drills had no bit guards, and lathes had no shields.*

Are guards attached to the machine when possible, and if that is not possible, attached elsewhere? [29 CFR 1910.212(a)(2)]

If hand tools are used for placing or removing material, are they designed to be easily handled without a need to place hands in a danger zone? [29 CFR 1910.212(a)(3)(iii)]

**Note:** *Such tools are not a substitute for guarding. They can only be used as supplemental protection.*

Are revolving drums, barrels and containers guarded by an enclosure that is interlocked so that containers cannot revolve unless the enclosure is in place? [29 CFR 1910.212(a)(4)]

Are all fans less than 7 feet from the floor equipped with guards that have openings no larger than one-half (1/2) inch? [29 CFR 1910.212(a)(5)]

**Note:** *Examples of cited violations include: exhaust fan blades and floor fans were not provided with protective guards, a portable table fan had a blade guard whose openings were approximately one inch in width, and a guard was broken creating a hole approximately 4" x 2."*

Is all machinery designed for a fixed location securely anchored to prevent "walking" or "moving?" [29 CFR 1910.212(b)]

Are all machines constructed, installed and maintained as to be free from excessive vibration or play? [Recommended]

Are all machines and equipment requiring the presence of an operator not left unattended while in operation or still in motion? [Recommended]

Are all machines provided with a power cut off switch that can be reached from the operating position? [Recommended]

Is all fixed motorized machinery equipped with a magnetic-type switch designed to prevent automatic restarting of machinery when power is restored after a power failure or electrical cutoff? [29 CFR 1910.213(b)(3)]

Are all machine operating controls easily reachable from the standard operating position and away from any hazardous point of operation? [29 CFR 1910.213(b)(4)]

Are all electrically powered machines provided with a positive means for rendering the motor starting controls inoperative while repairs or tool changes are being made? [29 CFR 1910.213(b)(5)]

Is your shop or lab equipped with two or more push-type emergency cut-out switches, provided at appropriate locations for each (maximum) 1000 square feet of shop floor area, for de-energizing the electrical supply to non-portable machinery? [Recommended]

***Note:** The switch must have a clear unobstructed access of at least 36 inches. In addition, the reset of the switch must be key operated.*

Are all power tools and machines which generate dust connected to a dust collection system? [Recommended]



If required in your state, are dust collections systems permitted by the appropriate state agency?

### **Machine Guarding**

Is there a training program to instruct employees on safe methods of machine operation?

Is there adequate supervision to ensure that employees are following safe machine operating procedures?

Is there a regular program of safety inspection of machinery and equipment?

Is all machinery and equipment kept clean and properly maintained?

Is sufficient clearance around and between machines to allow for safe operations, set up and servicing, material handling and waste removal?

Is equipment and machinery securely placed and anchored, when necessary to prevent tipping or other movement that could result in personal injury?

Is there a power shut off switch within reach of the operator's position at each machine?

Can electric power to each machine be locked out for maintenance, repair, or security?

Are the non-current-carrying metal parts of electrically operated machines bonded and grounded?

Are foot operated switches guarded or arranged to prevent accidental actuation by personnel or falling objects?

Are manually operated valves and switches controlling the operation of equipment and machines clearly identified and readily accessible?

Are all emergency stop buttons colored red?

Are all pulleys and belts that are within 7 feet of the floor or working level properly guarded?

Are all moving chains and gears properly guarded?

Are splashguards mounted on machines that use coolant to prevent the coolant from reaching employees?

Are methods provided to protect the operator and other employees in the machine area from hazards created at the point of operation, in-going nip points, rotating parts, flying chips, and sparks?

Are machinery guards secure and so arranged that they do not offer a hazard in their use?

If special hand-tools are used for placing and removing material, do they protect the operator's hands?

Are revolving drums, barrels, and containers required to be guarded by an enclosure that is interlocked with the drive mechanism, so that revolution cannot occur unless the guard enclosures are in place, so guarded?

Do arbors and mandrels have firm and secure bearings and are they free from play?

Are provisions made to prevent machines from automatically starting when power is restored after a power failure or shutdown?

Are machines so constructed so as to be free from excessive vibration when the largest tool is mounted and run at full speed?

If machinery is cleaned with compressed air, is air pressure controlled and personal protective equipment or other safeguards utilized to protect operators and other workers from eye and body injury?

Are fan blades protected with a guard having opening no larger than ½ inch, when operating within 7 feet of the floor?

Are saws used for ripping equipped with anti kick-back devices and spreaders?

Are radial arm saws so arranged that the cutting head will gently return to the back of the table when released?

### **Playgrounds**

Is the overall equipment **properly maintained** to ensure:

- nuts, bolts, and screws are recessed, covered or sanded smooth and level;
- nuts and bolts are tight and not able to be loosened without tools;
- metal equipment is free of rust and chipping paint;
- wooden equipment is free of splinters and rough surfaces;
- equipment is free of sharp edges;
- ropes, chains, and cables have not frayed or worn out;
- equipment has not shifted or become bent;
- there are no open "V" entrapment angles on any part of the equipment;
- there are no holes in the equipment forming finger traps (e.g. at the ends of the tubes);
- there are no pinch, crush, and shear points;
- there is no corrosion or visible rotting at points where equipment comes into contact with ground surfaces;

no components are missing. All parts of the equipment are present;  
there are no head entrapment areas (spaces 3½” to 9”);  
handgrips are between 1” and 1.67” in diameter for playgrounds designed for  
ages 6-12 and 1.25” for playgrounds designed for ages 2-5;  
footing for equipment is stable and buried below ground level or covered by  
surfacing materials?

Is playground evaluated for **general environmental hazards**:

can be reached safely by children (on foot or on bicycle);  
if needed, a suitable perimeter fence is provided for border hazards within  
100’ of playground edge (streets with heavy traffic, railroad tracks,  
parking lots, etc.);  
seating (benches, outdoor tables) is in good condition (free of splinters,  
missing hardware or slats, protruding bolts, etc.);  
signs to give information about where to seek help in case of emergency  
signs to give information about regulations on the use of the playground  
(hours, pets, age, etc.)  
signs to give information of name and number of responsible authority (to  
report hazards);  
signs on all bordering roads advise motorists that a playground is nearby;  
trash receptacles are provided, located outside of the play area, and emptied  
daily;  
poisonous plants are removed from play area;  
shaded area is provided;  
the play area is visible to deter inappropriate behavior?

Is equipment designed for **appropriate age/size**:

are the children who use the equipment of age/developmental level for which the  
equipment was designed (i.e. ages 2-5 and 6-12);  
the playground design separates younger users (2-5) through appropriately  
selected equipment;  
the play area has signage that informs users of the intended user age group?

4. Is equipment designed for **accessibility**:

the playground is accessible to people with disabilities (access to playground  
is at least 60” wide);  
the playground use zone has an accessible safety surface;  
accessible restroom facilities are located nearby;  
accessible seating is located in the play area;  
an accessible source of drinking water is available in or near the play area?

Is playground **protective surface** present to ensure:

all elevated play equipment (slides, swings, bridges, seesaws, climbing apparatus,  
etc.) has 12” of loose fill or impact-absorbing material underneath and extending  
a minimum of 6’ around the structure;  
surfacing materials, such as sand, pea gravel (round 1/8” pellets), wood chips,  
or manufactured unitary surfaces pass the 200 G test from the highest  
accessible part of the equipment;

surfaces are checked at least weekly and raked to prevent them from becoming packed down and to remove hidden hazards (e.g. litter, sharp objects, animal feces);  
loose materials are replenished as needed to maintain adequate depth and coverage;  
standing water is not found on the surface or inside the equipment?

Are **slides** constructed to ensure:

they are no more than 8 feet high;  
the ladder to access the slide is angled at less than 75 degrees with handrails on both sides, flat steps spaced less than 12" apart, and completely enclosed risers;  
the flat surface at the top of the slide is a minimum of 22" long going back from the slide bed-way and is the width of the slide;  
there is a barrier at the top of the slide to prevent falls with handholds to assist in sitting;  
sides of the bed-ways are at least 4" high;  
the angle of the sliding surface averages less than or equal to 30 degrees;  
a flat sliding surface (run out zone) at the bottom of the slide is a minimum of 11" long;  
for slides taller than 4 feet high designed for school age children (5-12 years), the bottom of the slide does not exceed 15" above the protective surface material;  
for slides 4' high or less and designed for preschool ages (2-5 years), the bottom of the slide does not exceed 11" above the protective surface material;  
tube slides have a minimum diameter equal to or greater than 23";  
there are no circular slides in the pre-school play area;  
the sliding surface is not made of wood or fiberglass;  
if the slide is made in several pieces, the sliding surface must have no gaps or rough edges?  
the sliding surface faces away from the sun or is located in the shade;  
steps are regularly spaced, less than or equal to 12" apart from top to bottom?

Are **climbing devices** constructed to ensure:

handholds stay in place when grasped;  
accessible equipment height (platform, deck, etc.) does not exceed 4' for 2-5 year old users;  
children have a safe way to descend equipment when they have reached the top;  
climbing bars and handrails are between 1" and 1.67" in diameter;  
there is a 29" (minimum protective perimeter barrier around pre-school (2-5) equipment that is more than 30" above the underlying surface;  
38" protective barriers are present when elevated surface exceeds 48" above underlying surface for school age children's (5-12) equipment;  
footholds are less than or equal to 12" apart from top to bottom;

spaces between openings should not be between 3½” and 9” to avoid entrapment hazards;  
guardrails are present for all elevated surfaces 30” above the underlying surface for school age children’s (5-12) equipment. (Over 48” needs protective barrier.);  
guardrails or protective barriers are present on all elevated surfaces greater than 20” above underlying surface for preschool age children (2-5).  
the center of the grasping device or horizontal ladders to the underlying surface material is no greater than 84” on climbing devices designated to children over the age of 5 years, 60” on devices for children from 2 to 5 years of age?

Are **swings** constructed to ensure:

multiple occupancy swings with the exception of tire swings are not recommended for use in public playgrounds and should be removed;  
animal figure swings are not recommended for use in public playgrounds and should be removed;  
rope swings are not recommended for use in public playgrounds and should be removed;  
swinging exercise rings and trapeze bars are not recommended for use in public playgrounds and should be removed;  
swing seats are to be made of canvas, rubber or other lightweight material;  
lightweight bucket-type swing seats are available for toddlers and children with disabilities and all openings meet entrapment criteria;  
the swing clearance in both directions must be 2 times the height of the swing;  
the swing clearance is to be covered with impact absorbing surface material;  
swings are to be at least 24” from each other and 30” away from the frame;  
“S” hook openings are no greater than .04”;  
hanging rings are less than 3½” or more than 10” in diameter;  
chain link openings do not exceed 5/16” in diameter (4.0 chain);  
when stationary, all seats are level;  
there are no two swings in any individual swing bay;  
preschool swing seats are at a maximum height of 18” and no occupied swing seat is less than 12” from the protective surface;  
the swing set crossbar is not more than 8’ above the surface for tot-swings and 10’ above the surface for school age children;  
for tire swings there is at least a 30” safety zone from the crossbeam support structure and the furthest extensions of the swing, and each must have a minimum clearance of 12” from the bottom of the tire to the protective surface;  
for tire swings have drainage openings every 5” to 6” if conventional tires are used;  
for tire swings **not** made of steel belted radial tires;  
to-fro swings and rotating equipment are located away from circulation paths (a distance at least equal to the equipment use zone and an additional safety factor for circulation) and near the periphery of the playground?

Are **seesaws** constructed to ensure:



- the maximum seat level does not reach more than 5' above the ground;
- the fulcrum is enclosed or designed to prevent pinching;
- handholds stay in place when grasped without turning or wobbling and do not extend beyond seat width;
- a rubber tire segment is buried in the surfacing material under the seats?

Are **sand play areas** established to ensure:

- located in a shaded area;
- inspected and raked at least every week for debris and to provide exposure to air and sun;
- if in a box, cover at night to prevent animal excrement contamination;
- does not have standing water?

Is **rocking equipment** constructed to ensure:

- seating surfaces are less than 30" above the protective surface;
- there are no equipment parts that could cause a pinching or crushing injury;
- handholds stay in place when grasped and pass the protrusion test;
- footrests stay in place and pass the protrusion test?

Is the **crawl through tunnel** constructed to ensure:

- all components of the tunnels are secure and firmly fixed;
- the internal diameter of the tunnel is at least 40";
- the tunnel has two safe, clear exits;
- the tunnel is designed to drain freely?

Are **merry-go-rounds** constructed to ensure:

- rotating platform is continuous and approximately circular. The difference between the minimum and maximum radii of a non-circular platform should not exceed 2";
- no components of the rotating equipment, including handrails, extend beyond the platform perimeter;
- there are no openings in the surface of the platform that permit the penetration of 5/16" rod through the surface;
- handrails should have a diameter between 1" and 1.67";
- there are no accessible shearing or crushing mechanisms in the undercarriage of the equipment;
- the platform does not provide up and down motion;
- The peripheral speed of the platform does not exceed 13 feet per second?

#### **Portable Ladders**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.25 (portable wooden ladders) and 29 CFR 1910.26 (portable metal ladders). It applies to wooden and metal ladders, including step ladders. It does not apply to stockroom step ladders, aisle-way step ladders, shelf ladders, and library ladders. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

### ***Portable Wooden Ladders***

Are all wooden ladder parts (a) sound, (b) free of sharp edges and splinters, and (c) on visual inspection, free from shake, wane, compression failure, decay, or other irregularities? [29 CFR 1910.25(b)(1)(i)]

Are all portable wooden step ladders 20 feet or less in length? [29 CFR 1910.25(c)(2)]

Is the portable step ladder of uniform step spacing and less than 12 inches apart? [29 CFR 1910.25(c)(2)(i)(b)]

Is the inside width between side rails of each portable step ladder at least 11-1/2 inches? [29 CFR 1910.25(c)(2)(i)(c)]

Is the metal spreader or locking device of portable step ladders of sufficient size and strength to securely hold the front and back sections in the open position? [29 CFR 1910.25(c)(2)(i)(f)]

Are all single wooden ladders 30 feet or less in length? [29 CFR 1910.25(c)(3)(ii)(a)]

Are all two-section wooden extension ladders 60 feet or less in length? [29 CFR 1910.25(c)(3)(iii)(a)]

Are all wooden ladders in good condition with the joint between the step and side rails tight? Are all hardware and fittings securely attached? Are the movable parts operating freely without binding or undue play? [29 CFR 1910.25(d)(1)(i)]

Are the metal bearings of locks, wheels, pulleys, etc. frequently lubricated? [29 CFR 1910.25(d)(1)(ii)]

Is frayed or badly worn rope replaced? [29 CFR 1910.25(d)(1)(iii)]

Are the safety feet or other auxiliary equipment kept in good condition? [29 CFR 1910.25(d)(1)(iv)]

Are wooden ladders inspected frequently? Are those with defects withdrawn from service for repair or destruction and tagged or marked as **Dangerous, do not use**? [29 CFR 1910.25(d)(1)(x) and (d)(2)(viii)]

***Note:** Wooden ladders with missing steps, rungs, or cleats; broken side rails; or other faulty equipment must not be used. Discarded ladders should be cut down the center of the rungs.*

Are rungs kept free of grease and oil? [29 CFR 1910.25(d)(1)(xi)]

Are wooden ladders used and placed so that the horizontal distance from the top support to the foot of the ladder is one quarter of the working length of the

ladder (the length along the ladder between the foot and the top support)? [29 CFR 1910.25(d)(2)(i)]

Is the ladder (a) placed to prevent slipping, (b) lashed, or (c) held in position? [29 CFR 1910.25(d)(2)(i)]

Is the use of wooden ladders in the horizontal position prohibited? [29 CFR 1910.25(d)(2)(i)]

***Note:** Ladders must never be used as platforms, runways, or scaffolds.*

Is only one person allowed on the ladder at one time? [29 CFR 1910.25(d)(2)(ii)]

Are ladders placed away from the front of doors that open toward the ladder unless the door is blocked, locked, or guarded? [29 CFR 1910.25(d)(2)(iv)]

Are ladders always placed on stable bases? [29 CFR 1910.25(d)(2)(v)]

***Note:** Ladders must never be placed on boxes, barrels, or other unstable bases.*

Is the splicing of short ladders together prohibited? [29 CFR 1910.25(d)(2)(ix)]

Is the use of the tops of stepladders as steps prohibited? [29 CFR 1910.25(d)(2)(xii)]

When in use, do all 36-foot or less two-section extension wooden ladders have a minimum overlap of 3 feet between the two sections? [29 CFR 1910.25(d)(2)(xiii)]

When in use, do all 36- to 48-foot two-section extension wooden ladders have a minimum overlap of 4 feet between the two sections? [29 CFR 1910.25(d)(2)(xiii)]

When in use, do all 48- to 60-foot two-section extension wooden ladders have a minimum overlap of 5 feet between the two sections? [29 CFR 1910.25(d)(2)(xiii)]

If ladders are used to gain access to a roof, are they extended at least 3 feet above the point of support?  
[29 CFR 1910.25(d)(2)(xv)]

Are all portable rung ladders equipped with non-slip bases where a hazard of slipping exists? [29 CFR 1910.25(d)(2)(xix)]

***Note:** Non-slip bases are not intended as a substitute for care in safely placing, lashing, or holding a ladder that is being used.*

### **Portable Metal Ladders**

Are metal ladders maintained in good usable condition at all times? [29 CFR 1910.26(c)(2)(iv)]

Are the rungs and steps of portable metal ladders corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize the possibility of slipping? [29 CFR 1910.26(a)(1)(v)]

Are all portable metal single ladders 30 feet or less in length? [29 CFR 1910.26(a)(2)(ii)]

Are all portable metal two-section ladders 48 feet or less in length? [29 CFR 1910.26(a)(2)(ii)]

If a portable metal ladder tips over, is it inspected immediately for damage? [29 CFR 1910.26(c)(2)(vi)(a)]

***Note:** The inspection must include looking for dents, bends, or excessively dented rungs; and checking all rungs to side rail connections, checking hardware connections, and checking rivets for shears.*

If metal ladders are exposed to oil and grease, are they cleaned immediately? [29 CFR 1910.26(c)(2)(vi)(d)]

Are metal ladders with defects marked and taken out of service until repaired by either the maintenance department or the manufacturer? [29 CFR 1910.26(c)(2)(vii)]

Are metal ladders placed at the proper angle? [29 CFR 1910.26(c)(3)(i)]

***Note:** That is, the base distance from the vertical wall to the ladder is one fourth the working length of the ladder or height at which the ladder touches the wall.*

Is the use of a metal ladder as a brace, skid, guy or gin pole, gangway, or for other uses than that which the ladder was intended prohibited? [29 CFR 1910.26(c)(3)(vii)]

Has inspection been conducted to determine if metal ladders might contact energized conductors? [29 CFR 1910.26(c)(3)(viii)]

***Note:** The use of metal ladders should be prohibited wherever they might make contact with energized electrical conductors.*

#### **Powered Lawnmowers**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.243(e). It applies to walk-behind and riding rotary mowers. Selected design specifications required in 29 CFR 1910.243(e) have not been included as part of this checklist. Please consult the OSHA regulations for additional details in this area. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that

this portion of the inspection complies with the OSHA or EPA standard, or with a non-regulatory recommendation.

### ***General Requirements***

1. Are all power-driven chains, belts, and gears positioned or otherwise guarded to prevent contact during starting, mounting, and operation? [29 CFR 1910.243(e)(1)(ii)]
2. Is a shutoff device provided to stop operation of a motor or engine? [29 CFR 1910.243(e)(1)(iii)]

***Note:*** *This device must require manual reactivation to restart the motor or engine. [29 CFR 1910.243(e)(1)(iii)]*

3. Are all positions of the operating controls clearly identified? [29 CFR 1910.243(e)(1)(iv)]
4. Are the words **Caution: be sure the operating control(s) is in neutral before starting the engine** (or similar wording) clearly visible at an engine-starting control point on self-propelled mowers? [29 CFR 1910.243(e)(1)(v)]

### ***Walk-Behind and Riding Rotary Mowers***

5. Is the mower blade enclosed except on the bottom, and the enclosure extended to or below the lowest cutting point of the blade in the lowest blade position? [29 CFR 1910.243(e)(2)(i)]
6. If guards must be removed to install a catcher assembly, is a warning affixed to the mower near the opening stating that the mower must not be used without either the catcher assembly or the guard in place? [29 CFR 1910.243(e)(2)(ii)(a)]
7. Are openings in the blade enclosure that are intended for discharge of grass limited to a maximum vertical angle of the 30-degree opening measured from the lowest blade position? [29 CFR 1910.243(e)(2)(iii)]
8. Is the word **Caution** (or stronger wording) placed on the mower at or near the discharge opening? [29 CFR 1910.243(e)(2)(v)]
9. After declutching or shutting off the power, do the blades stop rotating from the manufacturer's maximum speed within 15 seconds? [29 CFR 1910.243(e)(2)(vii)]

### ***Walk-Behind Rotary Mowers***

10. Is the horizontal angle of the opening(s) in the blade enclosure intended for the discharge of grass directed so it does not contact the operator? [29 CFR 1910.243(e)(3)(i)]
11. Is one of the following found at all openings in the blade enclosure intended for the discharge of grass? [29 CFR 1910.243(e)(3)(ii)]

A minimum unobstructed horizontal distance of 3 inches from the end of the discharge chute to the blade tip circle [29 CFR 1910.243(e)(3)(ii)(a)]

A rigid bar fastened across the discharge opening, secured to prevent removal without the use of tools.

The bottom of the bar shall be no higher than the bottom edge of the blade enclosure. [29 CFR 1910.243(e)(3)(ii)(b)]

12. Is the highest point on the blade enclosure front (except discharge openings) 1-1/4 inches or less above the lowest cutting point of the blade in the lowest blade position? [29 CFR 1910.243(e)(3)(iii)]
13. Is the mower handle fastened to the mower to prevent loss of control by uncoupling? [29 CFR 1910.243(e)(3)(iv)]
14. Is a positive up-stop or latch provided for the mower handle in the normal operating position? [29 CFR 1910.243(e)(3)(v)]

*Note: The up-stop shall not be disengaged during normal operation of the mower.*

15. Do wheel-drive disengaging controls, except dead man controls, move opposite to the direction of the vehicle motion to disengage the drive? [29 CFR 1910.243(e)(3)(vii)]

*Note: Dead man controls shall automatically interrupt the power to a drive when the operator's activating force is removed, and may operate in any direction to disengage the drive.*

### ***Riding Rotary Mowers***

16. Are openings placed so that grass or debris will not discharge directly toward any part of the operator's seat in the normal operating position? [29 CFR 1910.243(e)(4)(ii)]
17. Is one of the following present at all openings in the blade enclosures intended for grass discharge? [29 CFR 1910.243(e)(4)(iii)]  
A minimum unobstructed horizontal distance of 6 inches from the end of the discharge chute to the blade tip circle [29 CFR 1910.243(e)(4)(iii)(a)]  
A rigid bar fastened across the discharge opening, secured to prevent removal without the use of tools.  
The bottom of the bar shall be no higher than the bottom edge of the blade enclosure. [29 CFR 1910.243(e)(4)(iii)(b)]
18. Are mowers provided with stops to prevent jackknifing or locking of the steering mechanisms? [29 CFR 1910.243(e)(4)(iv)]
19. Are vehicle-stopping means provided? [29 CFR 1910.243(e)(4)(v)]
20. Do hand-operated wheel-drive disengaging controls move opposite to the direction of the vehicle motion to disengage the drive? [29 CFR 1910.243(e)(4)(vi)]
21. Do foot-operated, wheel-drive disengaging controls disengage the drive when depressed? [29 CFR 1910.243(e)(4)(vi)]

22. Do dead man controls (both hand- and foot-operated) automatically interrupt power to the drive when the mower's actuating force is removed, and operate in any direction to disengage the drive? [29 CFR 1910.243(e)(4)(vi)]

### **Respiratory Protection**

**Guidelines:** This checklist applies to the use of either atmosphere-supplying or air-purifying respirators being worn, voluntarily or otherwise, for comfort or to protect health. The checklist is divided into three sections. "Section One" should be used if filtering face-piece (dust mask) respirators are voluntarily used. "Section Two" should be used if respirators other than dust masks are voluntarily used. "Section Three" should be used if respirators are required to protect individuals from exposure to air contaminants above applicable limits. This checklist does not deal with respirators for immediately dangerous to life or health (IDLH) atmospheres, for agricultural use, or for emergency escape.



Questions marked with this symbol may require the help of an outside expert.

### ***Voluntary Use of Filtering Face pieces (Dust Masks)***

Are filtering face pieces (dust masks) provided which are clean and uncontaminated? [29 CFR 1910.134(c)(2)]

Does the use of the dust mask not interfere with the individual's ability to work safely? [29 CFR 1910.134(c)(2)]

Has a copy of **Appendix D** (see below) been given to each voluntary wearer? [29 CFR 1910.134(c)(2)(i)]

Note: A copy of **Appendix D** (see below) is included in this checklist.

### ***Voluntary Use of Respirators Other Than Dust Masks***

Does the use of the respirator not interfere with the individual's ability to work safely? [29 CFR 1910.134(c)(2)]

Has a copy of **Appendix D** (see below) been given to each voluntary wearer? [29 CFR 1910.134(c)(2)(i)]

Note: A copy of **Appendix D** (see below) is included in this checklist.



Is there a written respiratory protection program that includes the following? [29 CFR 1910.134(c)(1)]

Medical evaluations of individuals who will wear respirators; and [29 CFR 1910.134(c)(1)(ii)]

Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators. [29 CFR 1910.134(c)(1)(v)]



Was a medical evaluation performed, before a respirator was used in the workplace, which determined the individual's ability to use a respirator? [29 CFR 1910.134(e)(1)]

**Note:** Consult 29 CFR 1910.134(e) for required medical evaluation procedures.

Are respirators which are issued for the exclusive use of an individual cleaned and disinfected as often as necessary to be maintained in a sanitary condition? [29 CFR 1910.134(h)(1)(i)]

**Note:** Exclusive use means the respirator is used only by one person and is not shared.

Are respirators which are issued to more than one individual cleaned and disinfected before being worn by different individuals? [29 CFR 1910.134(h)(1)(ii)]

Are respirators stored so as to be protected from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals? [29 CFR 1910.134(h)(2)(i)]

Are respirators which are used in routine situations inspected before each use and during cleaning? [29 CFR 1910.134(h)(3)(i)(A)]

Are respirators that fail an inspection or are otherwise found to be defective removed from service and either discarded or repaired? [29 CFR 1910.134(h)(4)]

### ***Respirators Required or Respirators Needed to Protect an Individual's Health***



Have engineering controls been employed, where possible, to prevent or reduce atmospheric contamination? [29 CFR 1910.134(a)(1)]

**Note:** Measures may include enclosure or confinement of an operation, general and local ventilation, and substitution of less toxic materials.



Is there a written respiratory protection program? [29 CFR 1910.134(c)(1)]

Does the written respiratory protection program include procedures for selecting respirators for use in the workplace? [29 CFR 1910.134(c)(1)(i)]

Does the written respiratory protection program include medical evaluations of individuals who will wear respirators? [29 CFR 1910.134(c)(1)(ii)]

Does the written respiratory protection program include fit testing procedures for tight-fitting respirators? [29 CFR 1910.134(c)(1)(iii)]

Does the written respiratory protection program include procedures for proper use of respirators in routine as well as reasonably foreseeable emergency situations? [29 CFR 1910.134(c)(1)(iv)]

Does the written respiratory protection program include procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators? [29 CFR 1910.134(c)(1)(v)]



Does the written respiratory protection program include procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere- supplying respirators? [29 CFR 1910.134(c)(1)(vi)]

Does the written respiratory protection program include training of individuals with regards to the respirator hazards to which they are potentially exposed during routine and emergency situations? [29 CFR 1910.134(c)(1)(vii)]

Does the written respiratory protection program include training of individuals in the proper use of respirators, including putting on and removing them, limitations of use, and their maintenance? [29 CFR 1910.134(c)(1)(viii)]

Does the written respiratory protection program include procedures for regularly evaluating the effectiveness of the program? [29 CFR 1910.134(c)(1)(ix)]

Has a program administrator been designated who is qualified by appropriate training and experience to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness? [29 CFR 1910.134(c)(3)]

Are respirators, training, and medical evaluations provided at no cost to individuals? [29 CFR 1910.134(c)(4)]

Are respirators selected on the basis of the anticipated hazards? [29 CFR 1910.134(d)(1)(i)]

Are all respirators **NIOSH certified**? [29 CFR 1910.134(d)(1)(ii)]



Has a potential respiratory hazard(s) been identified and evaluated? [29 CFR 1910.134(d)(1)(iii)]

***Note:** This evaluation shall include a reasonable estimate of a person's exposure to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Although personal air monitoring is the most reliable and accurate method to determine exposure, it is not required.*



Are medical evaluations performed, before a respirator is used in the workplace, to determine an individual's ability to use a respirator? [29 CFR 1910.134(e)(1)]

***Note:** The employer may discontinue medical evaluations when the individual is no longer required to use a respirator. Consult 29 CFR 1910.134(e) for required medical evaluation procedures.*



Has an appropriate qualitative fit test or quantitative fit test been conducted on individuals who are using tight-fitting respirators? [29 CFR 1910.134(f)(1)]

***Note:** A record of the fit test should be maintained to document compliance.*

Was the fit test conducted prior to the initial use of the respirator, whenever a different face piece (size, style, model or make) is used, and at least annually thereafter? [29 CFR 1910.134(f)(2)]

Is the wearing of tight-fitting respirator face pieces prohibited whenever any condition that interferes with the face-to-face piece seal or valve function is present? [29 CFR 1910.134(g)(1)(i)]

***Note:** Facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function is prohibited.*

Are corrective glasses or goggles or other personal protective equipment worn so as not to interfere with the seal of the face piece to the face of the user? [29 CFR 1910.134(g)(1)(ii)]

Is a user seal check performed by the employee each time a tight fitting respirator is put on? [29 CFR 1920.134(g)(1)(iii)]

***Note:** User seal checks include positive and negative pressure checks to identify potential leakage around the face piece.*

Do individuals leave the respirator use area to wash their faces and face pieces as necessary, to replace filter, cartridge, or canister elements, or if they detect vapor or gas breakthrough, changes in breathing resistance, or face piece leakage? [29 CFR 1910.134(g)(2)(ii)]

Are respirators which are issued for the exclusive use of an individual cleaned and disinfected as often as necessary to be maintained in a sanitary condition? [29 CFR 1910.134(h)(1)(i)]

Are respirators which are issued to more than one individual cleaned and disinfected before being worn by different individuals? [29 CFR 1910.134(h)(1)(ii)]

Are respirators stored so as to be protected from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture or damaging chemicals? [29 CFR 1910.134(h)(2)(i)]

Are respirators which are used routinely inspected before each use and during cleaning? [29 CFR 1910.134(h)(3)(1)(A)]

Are respirators that fail an inspection or are otherwise found to be defective removed from service and either discarded or repaired? [29 CFR 1910.134(h)(4)]

Does compressed breathing air meet the requirements for Grade D Breathing Air? [29 CFR 1910.134(i)(1)(ii)]

***Note:** Documentation of breathing air quality should be maintained to show compliance.*

Are compressors used to supply breathing air situated so as to prevent entry of contaminated air into the air supply system? [29 CFR 1910.134(i)(5)(i)]

Are compressors used to supply breathing air constructed so as to minimize moisture content? [29 CFR 1910.134(i)(5)(ii)]

Are compressors used to supply breathing air equipped with air-purifying sorbent beds and filters to further ensure breathing air quality? [29 CFR 1910.134(i)(5)(iii)]

Are compressors used to supply breathing air provided with tags indicating the most recent date on which the air-purification filters or sorbent beds were changed, along with the signature of the authorized person performing the change? [29 CFR 1910.134(i)(5)(iv)]

Are high temperature or carbon monoxide alarms, or both, present on oil-lubricated compressors to monitor carbon monoxide levels? [29 CFR 1910.134(i)(7)]

Are filters, cartridges and canisters labeled and color-coded with the NIOSH approval label? [29 CFR 1910.134(j)]

Has training been provided to individuals who wear respirators on why the respirator is necessary and its proper use, fit, and maintenance? [29 CFR 1910.134(k)(1)(i)]

Has training been provided to individuals who wear respirators on the capabilities and limitations of the respirator? [29 CFR 1910.134(k)(1)(ii)]

Has training been provided to individuals who wear respirators on how to use the respirator in emergency situations? [29 CFR 1910.134(k)(1)(iii)]

Has training been provided to individuals who wear respirators on how to inspect, put on and remove, use, and check the seals of the respirator? [29 CFR 1910.134(k)(1)(iv)]

Has training been provided to individuals who wear respirators on procedures for maintenance and storage of the respirator? [29 CFR 1910.134(k)(1)(v)]

Has training been provided to individuals who wear respirators on how to recognize medical signs and symptoms that may limit or prevent the effective use of respirators? [29 CFR 1910.134(k)(1)(vi)]

Are workplace evaluations conducted to ensure that the written respiratory protection program is being properly implemented? [29 CFR 1910.134(l)]

Are records maintained for 30 years regarding medical evaluations, fit testing, and the respirator program? [29 CFR 1910.134(m)]

### ***Definitions:***

**Dust mask:** a filtering face piece type respirator.

**Engineering control:** physical changes to equipment and operations to reduce exposure to air contaminants. Engineering controls may include: adding local exhaust ventilation, changing to better equipment that release less air contaminants and enclosing operations to prevent exposure.

**Filtering face piece (dust mask):** a negative pressure particulate respirator with a filter as an integral part of the face piece or with the entire face piece composed of the filtering medium.

**Grade D breathing air:** air quality specified by the Compressed Gas Association Commodity Specification G7.1-1989 as referenced in OSHA 29 CFR

1910.134(i)(1)(ii). It specifies that the oxygen content be 19.5-23.5%, the condensed hydrocarbon concentration be at or below 5 mg/m<sup>3</sup>, the carbon monoxide concentration be at or below 10 ppm, and the carbon dioxide concentration be at or below 1,000 ppm.

**Immediately dangerous to life or health (IDLH):** an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

**NIOSH "certified" respirator:** a respirator meeting the requirements of 42 CFR Part 84. All respirators approved by NIOSH have an approval number that looks like this: TC-84A-111 or TC-23C-222. A respirator is "approved" for a specific set of circumstances and conditions. If the particular circumstances or conditions of use exceed those for which it was approved, the respirator may provide inappropriate protection and is no longer considered to be approved. The following are examples of things you can do to invalidate the approvals: altering the respirator in any way such as by removing a strap or interchanging parts; using an air-purifying respirator equipped with organic vapor cartridges for an organic vapor with poor warning properties; using an air-purifying respirator equipped with organic vapor cartridges for an organic vapor at concentrations above the maximum use concentration established by OSHA or NIOSH.

#### **Appendix D to 1910.134 (Slightly Modified): Information for Individuals Using Respirators When Not Required Under the Standard**

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for individuals. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the individual. Sometimes, individuals may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by applicable standards. If your school provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.

Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect against gases, vapors, or very small solid particles of fumes or smoke.

Keep track of your respirator so that you do not mistakenly use someone else's respirator.

#### **Scaffolds**

Is it required that if the platform is not protected by standard handrails and toe boards, a safety harness be used?

Are freestanding scaffolds stable; anchored if necessary?

Is the use of fiber rope prohibited if used around extreme heat, open flame, or where burning, welding, or cutting is done?

Is there a pre-use inspection of scaffolding?

Has scaffolding been constructed, maintained, and placed in accordance with structural manufacture's specifications?

#### **Spraying Operations**

Is adequate ventilation assured before spray operations are started?

Is mechanical ventilation provided when spraying operations are done in enclosed areas?

When mechanical ventilation is provided during spraying operations, is it so arranged that it will not circulate the contaminated air?

Is the spray area free of hot surfaces?

Is the spray area at least 20 feet from flames, sparks, operating electrical motors and the other ignition sources?

Are portable lamps used to illuminate spray areas suitable for use in a hazardous location?

Is approved respiratory equipment provided and used when appropriate during spraying operations?

Do solvents used for cleaning have a flash point of 100 degrees F or more?

Are fire control sprinkler heads kept clean?

Are “**NO SMOKING**” signs posted in spray areas, paint rooms, paint booths, and paint storage areas?

Is the spray area kept clean of combustible residue?

Are spray booths constructed of metal, masonry, or other substantial noncombustible material?

Are spray booth floors and baffles noncombustible and easily cleaned?

Is infrared drying apparatus kept out of the spray area during spray operations?

Is the spray booth completely ventilated before using the drying apparatus?

Is the electric drying apparatus properly grounded?

Are lighting fixtures for spray booths located outside of the booth and the interior lighted through sealed clear panels?

Are the electrical motors for exhaust fans placed outside the booths or ducts?

Are belts and pulleys inside the booth fully enclosed?

Do ducts have access doors to allow cleaning?

Do all drying spaces have adequate ventilation?

Is appropriate personal protective equipment provided and used?

Is the correct type of respirator being worn by personnel?

Are all chemicals used in spray painting operations correctly labeled?

Are MSDSs for all chemicals accessible and reviewed?

Are tools used for cleaning purposes made of non-sparking material?

Do electrical and fire suppression methods meet codes for Hazardous Communications?

**Tools (Portable Hand and Power)**

**Guidelines:** This checklist applies to hand and portable power tools and equipment including pneumatic power tools. Fixed and portable abrasive wheels and tools, and fixed woodworking machinery are covered in other checklists.

***General Requirements***

Are all portable hand or power tools maintained in a safe condition? [29 CFR 1926.300(a)]

If compressed air is used for cleaning purposes, is it used at pressures less than 30 psi and only with effective chip guarding and personal protective equipment? [29 CFR 1910.242(b) and 1926.302(b)(4)]

Are power tools equipped and used with guards whenever possible? [29 CFR 1926.300(b)(1)]

Are all belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating or moving parts of equipment guarded if operator is exposed to contact or if they otherwise create a hazard? [29 CFR 1926.300(b)(2)]

Is all necessary personal protective equipment provided whenever the use of hand and power tools could create falling, flying or splashing debris, or harmful dusts, fumes, mists, vapors, or gases. [29 CFR 1926.300(c)]

If tools and equipment are brought in from home, are they subject to the same safety requirements as supplied tools and equipment? [29 CFR 1910.242(a)]

Are all chain saws, percussion tools, and hand-held powered circular saws (with blades greater than 2 inches in diameter) equipped with a constant pressure switch that shuts off power when released? [29 CFR 1910.243(a)(2)(i); and 1926.300(d)(3)]

Are all hand-held powered drills; tappers; fastener drivers; horizontal, vertical and angle grinders (with wheels greater than 2 inches in diameter); disc sanders (with discs greater than 2 inches in diameter); belt sanders; reciprocating saws; saber, scroll, jig saws (with blade shanks greater than a nominal one-fourth (1/4) inch); and other similarly power tools equipped with a constant pressure switch or control? [29 CFR 1910.243(a)(2)(ii) and 1926.300 (d)(1)-(3)]

***Note:*** They may be equipped with a lock-on control provided the turnoff can be accomplished by a single motion by the same finger or fingers that turns it on. **The Construction standard requires a "momentary contact on-off control" instead of a constant pressure switch or control. This means that if the switch is pressed, the tool turns on and if the switch is pressed again, the tool turns off.**

Are all hand held powered planer sanders, grinders (with wheels two-inch diameter or less), routers, planers, laminate trimmers, nibblers, shears, scroll saws, and jig saws (with blade shanks one-fourth (1/4) of an inch wide or less), equipped with a positive "on-off" control? [29 CFR 1910.243(a)(2)(iii) and 1926.300(d)(1)]

***Note:*** A positive "on-off" control means a switch that you must push to turn the tool on and then push again to turn it off. Control switches as described in questions seven and eight may also be used.

On hand-held power tools, is the operating control located so as to minimize the possibility of accidental operation? [29 CFR 1910.243(a)(2)(iv)]

***Note:*** This requirement does not apply to concrete vibrators, concrete breakers, powered tampers, jackhammers, rock drills, garden appliances, household and kitchen appliances, personal care appliances, medical or dental equipment, or to fixed machinery.

Are all portable power driven circular saws (with blade diameter greater than 2 inches) equipped with guards above and below the base plate or shoe? [29 CFR 1910.243(a)(1)(i) and 1926.304(d)]

***Note:** This requirement does not apply to meat cutting saws.*

Does the upper guard on a circular saw cover the saw to the depth of the teeth, except for the minimum arc required to permit the base to be tilted for bevel cuts? [29 CFR 1926.304(d)]

Does the lower guard on a circular saw cover the saw to the depth of the teeth, except for the minimum arc required to allow proper retraction and contact with the work? [29 CFR 1926.304(d)]

When a circular saw is removed from the material being sawed, does the lower guard automatically and instantly return to the covering position? [29 CFR 1926.304(d)]

Are belt sanding machines provided with guards at each nip point, where the sanding belt runs onto a pulley? [29 CFR 1910.243(a)(3)]

If a saw cracks, is it immediately removed from service? [29 CFR 1910.243(a)(4)]

Are all portable, electrically powered tools properly grounded or double insulated? [29 CFR 1910.243(a)(5) and 1926.302(a)(1)]

Are impact tools, such as drift pins, wedges, and chisels, kept free of mushroomed heads? [29 CFR 1926.301(c)]

Are the wooden handles of tools kept free of splinters or cracks and are they fixed tightly in the tool? [29 CFR 1926.301(d)]

Is it prohibited to lower or hoist a tool by the cord? [29 CFR 1926.302(a)(2)]

Do woodworking tools meet the American National Standards Institute (ANSI) safety codes? [29 CFR 1926.304(f)]

### ***Pneumatic Power Tools and Hose***

Are pneumatic power tools secured to the hose or whip by some positive means, so as to prevent the tool from being accidentally disconnected? [29 CFR 1926.302(b)(1)]

Are safety clips or retainers used on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled? [29 CFR 1910.243(b)(1) and 1926.302(b)(2)]

Are all pneumatically driven nailers, staplers, and other similar equipment which have automatic fastener feeds and which operate at more than 100 psi pressure at the tool equipped with a safety device on the nozzle to prevent the tool from



ejecting fasteners, unless the muzzle is in contact with the work surface? [29 CFR 1926.302(b)(3)]

Are all compressed air hoses and hose connections designed for the pressure and service to which they are subjected? [29 CFR 1910.243(b)(2) and 1926.302(b)(5)]

Is it prohibited to lower or hoist tools by the hose? [29 CFR 1926.302(b)(6)]

Do all hoses (exceeding one-half inch inside diameter) have safety devices at the source of the supply or branch line, to reduce pressure in case of hose failure? [29 CFR 1926.302(b)(7)]

Are airless spray guns [of the type which atomize paints and fluids at high pressure (1,000 pounds or more per square inch)] equipped with automatic or visible manual safety devices which prevent accidental release of paint or fluid? [29 CFR 1926.302(b)(8)]

***Note:** In lieu of the above, a diffuser nut which will prevent high pressure, high velocity release while the nozzle tip is removed, plus a nozzle tip guard which will prevent the tip from coming in contact with the operator (or other equivalent protection) shall be provided.*

Are all fuel powered tools stopped while being refueled, serviced, or maintained? [29 CFR 1926.302(c)(1)]

Is all fuel transported, handled, and stored in accordance with applicable regulations? [29 CFR 1926.302(c)(1)]

When fuel powered tools are used in enclosed spaces, are measures taken to prevent the build-up of toxic gases? [29 CFR 1926.302(c)(2)]

#### **Welding and Cutting with Oxygen-Fuel Gas**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.253 and the construction standard 29 CFR 1926.350. It applies to operations involving oxygen-fuel gas welding and cutting. **This checklist must be used with the Welding, Cutting, and Brazing--General Requirements checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a non-regulatory recommendation.

This checklist does not cover the extensive regulations dealing with manifolding of cylinders, service piping systems, pressure relief devices, piping protective equipment, and acetylene generators. Consult the OSHA regulations in 29 CFR 1910.253 for further details.

#### **General Requirements**

Is acetylene generated, piped, or used at pressures no greater than 15 psig (pounds per square inch, gauge) or 30 psia (pounds per square inch, absolute)? [29 CFR 1910.253(a)(2)]

Is all welding apparatus (torches, regulators, pressure-reducing valves, acetylene generators, and manifolds) purchased from reputable welding dealers who have indicated the equipment is suitable for the intended purpose? [29 CFR 1910.253(a)(3)]

Are all employees trained and judged competent in the use of welding apparatus? [29 CFR 1910.253(a)(4) and 1926.350(d)]

Are rules and instructions covering the operation and maintenance of oxygen or fuel-gas supply equipment readily available? [29 CFR 1910.253(a)(4)]

### ***Cylinders and Containers***

Are all compressed gas cylinders legibly marked on their shoulders (by stenciling, stamping, or permanent labeling) with the chemical or trade name of the gas? [29 CFR 1910.253(b)(1)(ii)]

Are oxygen and acetylene cylinders kept away from radiators and other sources of heat? [29 CFR 1910.253(b)(2)(i)]

Inside buildings, are cylinders stored in well-protected, well-ventilated, dry locations at least 20 feet from highly combustible material such as oil? [29 CFR 1910.253(b)(2)(ii)]

Are cylinders stored in designated spaces where they will not be knocked over, damaged by passing or falling objects, or subjected to tampering by unauthorized people? [29 CFR 1910.253(b)(2)(ii)]

Do empty cylinders have the valves closed? [29 CFR 1910.253(b)(2)(iii) and (b)(5)(ii)(H) and 1926.350(a)(8)]

Are valve-protection caps always in place on cylinders that are not in use? [29 CFR 1910.253(b)(2)(iv) and 1926.350(a)(1)]

Is storage of fuel gas cylinders inside a building limited to a total gas capacity of 2,000 cubic feet or 300 pounds of liquefied petroleum gas (except for those being used or attached and ready to use)? [29 CFR 1910.253(b)(3)]

Is a separate, specially constructed room or compartment provided to store cylinders that have more than 2,000 cubic feet total gas capacity or 300 pounds of liquefied petroleum gas? [29 CFR 1910.253(b)(3)(i)]

Are stored oxygen cylinders separated from fuel-gas cylinders or combustible materials (especially oil or grease) by at least 20 feet, or by a noncombustible barrier at least 5 feet high with a fire-resistance rating of at least one-half hour? [29 CFR 1910.253(b)(4)(iii)]

Are cylinders, cylinder valves, couplings, regulators, hoses, and apparatus kept free from oily and greasy substances? [29 CFR 1910.253(b)(5)(i) and 1926.350(i)]

Are employees and students required to handle oxygen cylinders with oil- and grease-free hands or gloves? [29 CFR 1910.253(b)(5)(i) and 1926.350(i)]

Is care taken to ensure cylinders are not dropped, struck, handled roughly, or permitted to strike each other violently? [29 CFR 1910.253(b)(5)(ii)(B), (b)(5)(ii)(O), and (b)(5)(iii)(B); and 1926.350(a)(3)]

***Note:** Cylinders may be moved by tilting and rolling them on their bottom edges, but a cylinder cart is strongly recommended.*

Is using valve-protection caps prohibited for lifting the cylinder from one vertical position to another? [29 CFR 1910.253(b)(5)(ii)(C) and 1926.350(a)(5)]

Unless the cylinders are secured on a special truck, are regulators removed and valve-protection caps installed before cylinders are moved? [29 CFR 1910.253(b)(5)(ii)(D) and 1926.350(a)(6)]

Do cylinders without fixed hand wheels have keys, handles, or nonadjustable wrenches on the valve stems while the cylinders are in service? [29 CFR 1910.253(b)(5)(ii)(E) and 1926.350(d)(2)]

Are cylinder valves closed when work is finished and before cylinders are moved? [29 CFR 1910.253(b)(5)(ii)(F) and (b)(5)(ii)(G) and 1926.350(a)(8)]

Are cylinders kept far enough away from the welding or cutting operation so that sparks, hot slag, or flames will not reach them? Or, are fire-resistant shields provided? [29 CFR 1910.253(b)(5)(ii)(I) and 1926.350(b)(1)]

Are cylinders placed where they cannot become part of an electrical circuit? [29 CFR 1910.253(b)(5)(ii)(J) and 1926.350(b)(2)]

Is using cylinders as rollers or supports prohibited? [29 CFR 1910.253(b)(5)(ii)(K) and 1926.350(c)(1)]

When cylinders are hoisted, are they secured on a cradle, sling-board, or pallet? [29 CFR 1926.350(a)(2)]

***Note:** Cylinders may not be hoisted or transported by magnets or choker slings.*

Is using a hammer or wrench to open cylinder valves prohibited? [29 CFR 1910.253(b)(5)(ii)(Q)]

***Note:** If valves cannot be opened by hand, notify the supplier.*

Is a policy in place to report problems promptly to the supplier? [29 CFR 1910.253(b)(5)(ii)(R)(1)]

***Note:** Employees and students should not attempt to repair a cylinder.*

Are fuel-gas cylinders placed with the valve end up whenever they are in use? [29 CFR 1910.253(b)(5)(iii)(A) and 1926.350(b)(3)]

Are compressed-gas cylinders secured in an upright position so they cannot fall or be knocked over? [29 CFR 1926.350(a)(9)]

***Note:** Use a suitable cylinder truck, chain, or other steadying device.*

Before connecting a regulator to a cylinder valve, do employees open the valve slightly and close it immediately? [29 CFR 1910.253(b)(5)(ii)(P) and (b)(5)(iii)(C) and 1926.350(d)(1)]

***Note:** Open the valve while standing to one side of the outlet; never in front of it. Never crack the fuel-gas or oxygen cylinder valve near other welding work or near sparks, flames, or other possible sources of ignition and combustion.*

Before a regulator is removed, is the cylinder valve closed and the gas released from the regulator? [29 CFR 1910.253(b)(5)(iii)(D) and 1926.350(d)(4)]

For torches or other devices equipped with shutoff valves, is the fuel gas from cylinders only used through a suitable regulator to reduce the pressure? [29 CFR 1926.350(d)(3)]

If cylinders have leaky valves or fittings that cannot be stopped by closing the valve or tightening the gland nut, are cylinders immediately taken outside away from sources of ignition and slowly emptied? [29 CFR 1910.253(b)(5)(iii)(F) and 1926.350(d)(5)]

Is tampering with safety devices prohibited? [29 CFR 1910.253(b)(5)(iii)(H)]

Are cylinder valves always opened slowly? [29 CFR 1910.253(b)(5)(iii)(J) and 1926.350(d)(2)]

Do employees and students know not to open acetylene cylinder valves more than 1-1/2 turns of the cylinder, and preferably no more than 3/4 of a turn? [29 CFR 1910.253(b)(5)(iii)(K) and 1926.350(d)(2)]

Is flash-back protection provided by an approved device that will prevent flame from passing into the fuel-gas system? [29 CFR 1910.253(e)(3)(ii)(C)(3)]

When parallel lengths of oxygen and fuel-gas hose are taped together for convenience or to prevent tangling, is four inches (or less) of every 12 inches of hosed taped? [29 CFR 1910.253(e)(5)(ii) and 1926.350(f)(2)]

Are the fuel-gas hose and oxygen hose easily distinguished from each other? [29 CFR 1926.350(f)(1)]

Are all hoses inspected at the beginning of each day? [29 CFR 1926.350(f)(3)]

Are leaking, defective, burned, or worn hoses removed, repaired, or replaced? [29 CFR 1910.253(e)(5)(v) and 1926.350(f)(3)]

Are hose couplings of the type that cannot be unlocked or disconnected by a straight pull without rotary motion? [29 CFR 1926.350(f)(5)]

Are boxes used for the storage of gas hose ventilated? [29 CFR 1926.350(f)(6)]

Are hoses, cables, and other equipment kept clear of passageways, ladders, and stairs? [29 CFR 1926.350(f)(7)]

Are clogged torch-tip openings cleaned with suitable cleaning wires, drills, or other devices designed for this purpose? [29 CFR 1926.350(g)(1)]

Are torches inspected at the beginning of each day for leaking shutoff valves, hose couplings, and tip connections? [29 CFR 1926.350(g)(2)]

Are defective torches removed from use? [29 CFR 1926.350(g)(2)]

Are torches lighted by friction lighters or other approved devices? [29 CFR 1926.350(g)(3)]

***Note:** Torches should not be lighted by matches or from hot work.*

Are regulators (including gauges) repaired only by skilled mechanics who have had proper instruction? [29 CFR 1910.253(e)(6)(ii)]

Are gauges on oxygen regulators marked **USE NO OIL**? [29 CFR 1910.253(e)(6)(iii)]

Are union nuts and connections on regulators inspected before use to detect faulty seats that may cause leakage of gas when the regulators are attached to the cylinder valves? [29 CFR 1910.253(e)(6)(iv)]

#### **Welding with Arc-Welding Equipment**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.254 and 1910.306, and the construction standards 1926.351 and 1926.353. It applies to the use of arc-welding and cutting equipment. **This checklist must be used with the Welding, Cutting, and Brazing--General Requirements checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a non-regulatory recommendation.



Questions marked with this symbol may require the help of an outside expert.

## ***General***

Are employees and students properly instructed and qualified to operate arc-welding equipment? [29 CFR 1910.254(a)(3) and 1926.351(d)]

## ***Application of Arc-Welding Equipment***

Does arc-welding equipment comply with the *Requirements for Electric Arc-Welding Apparatus* (NEMA EW-1-1962, National Electric Manufacturers Association), or the *Safety Standard for Transformer-Type Arc-Welding Machines* (ANSI C33-2-1956, Underwriters Laboratories)? [29 CFR 1910.254(b)(1)]

Are arc-welding machines designed and constructed to operate under their anticipated environmental conditions including unusual altitude, temperature, corrosive chemicals, steam, humidity, oil vapors, flammable liquids, vibration/shock, dust, or weather? [29 CFR 1910.254(b)(2)]

Are alternating-current **manual** arc-welding and cutting machines limited to 80 volts? [29 CFR 1910.254(b)(3)(i)(A)]

Are alternating-current **automatic** arc-welding and cutting machines limited to 100 volts? [29 CFR 1910.254(b)(3)(i)(B)]

Are **manual** or **automatic** direct-current (DC) arc-welding and cutting machines limited to 100 volts? [29 CFR 1910.254(b)(3)(ii)(A)]

Are terminals for welding leads protected from contact? [29 CFR 1910.254(b)(4)(iv)]

When manual electrode holders are used, are they designed specifically for arc welding and cutting? [29 CFR 1926.351(a)(1)]

Are manual electrode holders of a capacity capable of safely handling the maximum rated current required by the electrodes? [29 CFR 1926.351(a)(1)]

Are the **outer surfaces of the jaws** of the holder and all **current-carrying parts passing through the portion of the holder** that the arc welder or cutter grips **fully insulated** against the maximum voltage to ground? [29 CFR 1926.351(a)(2)]

Are arc-welding and cutting cables completely insulated, flexible, and capable of handling the maximum current requirement of the work in progress? [29 CFR 1926.351(b)(1)]

## ***Installation of Arc-Welding Equipment***

Are arc-welding **machine frames** or **cases** electrically grounded? [29 CFR 1910.254(c)(2)(i)]

Does the circuit between the ground and the grounded power conductor have resistance low enough to permit sufficient current to flow to cause the fuse or circuit breaker to interrupt the current? [29 CFR 1926.351(c)(5)]

Do ground return cables have a safe current-carrying capacity equal to or greater than the maximum output capacity of the arc-welding or cutting unit that it services? [29 CFR 1926.351(c)(1)]

Are chains, wire ropes, cranes, hoists, elevators, and conduits containing electrical conductors prohibited from being used to complete work-lead circuits? [29 CFR 1910.254(c)(2)(ii) and (iii) and 1926.351(c)(2)]

If pipelines are temporarily used to complete work-lead circuits, are they free from threaded joints, flange-bolted joints, or caulked joints? [29 CFR 1910.254(c)(2)(ii)]

***Note:** Special precautions must also be used to avoid sparking at connection of the work-lead current.*

If a structure or pipeline is used as a ground-return circuit, are periodic inspections performed to determine that the required electrical contact exists at all joints? [29 CFR 1926.351(c)(3)]

***Note:** The generation of an arc, sparks, or heat at any point shall cause rejection of the structures as a ground circuit. If the structure or pipelines are used continuously, all joints should be bonded and periodic inspections conducted to ensure that no condition of electrolysis or fire hazard exists because of such use.*

Are all grounding connections checked to determine that they are mechanically strong and electrically adequate for the required current? [29 CFR 1910.254(c)(2)(v) and 1926.351(c)(6)]

Is a disconnecting switch with over-current protection located at or near each arc-welding machine that does not have such a switch? [29 CFR 1910.254(c)(3)(i) and 29 CFR 1910.306(d)(1)]

Is a disconnecting switch with over-current protection provided for each outlet intended for connection to a portable welding machine? [29 CFR 1910.254(c)(3)(i)]

For individual welding machines, is the rated current-carrying capacity of the supply conductors not less than the rated primary current of the welding machine? [29 CFR 1910.254(c)(3)(ii)]



Are all **DC** arc-welding machines connected with the same polarity? [29 CFR 1910.254(c)(3)(iv)(A)]



Are all **AC** arc-welding machines connected to the same phase of the supply circuit and with the same instantaneous polarity? [29 CFR 1910.254(c)(3)(iv)(B)]

### ***Operation and Maintenance***

Are employees and students assigned to operate or maintain arc-welding equipment acquainted with the requirements of 29 CFR 1910.252 and 1910.254? [29 CFR 1910.254(d)(1)]

Are employees and students engaged in gas-shielded arc-welding acquainted with *Recommended Safe Practices for Gas-Shielded Arc-Welding* (A6.1-1966, American Welding Society)? [29 CFR 1910.254(d)(1)]

Are arc-welding machine hookups checked before starting operations? [29 CFR 1910.254(d)(2)]

Is coiled welding cable spread out before use to avoid serious overheating and damage to insulation? [29 CFR 1910.254(d)(2)]

Is the grounding of the welding machine frame checked before operations are started? [29 CFR 1910.254(d)(3)]

Are arc-welding machines checked for leaks of cooling water, shielding gas, or engine fuel before operations are started? [29 CFR 1910.254(d)(4)]

Is proper switching equipment provided for shutting down the machine? [29 CFR 1910.254(d)(5)]

Are the manufacturer's printed rules and instructions covering operation of the equipment supplied strictly followed? [29 CFR 1910.254(d)(6)]

When not in use for any substantial period of time (such as during lunch hour or overnight) are (a) electrodes removed from the holders; (b) the holders safely placed so they cannot make contact with people, conductive objects, fuel or compressed gas tanks; and (c) the machines disconnected from the power source? [29 CFR 1910.254(d)(7) and 1926.351(d)(1) and (d)(3)]

Are electrode cables free from splices within 10 feet from holders? [29 CFR 1910.254(d)(8) and 1926.351(b)(1)]

***Note:** The general industry standard 1910.254(d)(9)(iii) and the construction standard 1926.351(b)(1) permit joining lengths of cable by standard insulated connectors specifically designed for that purpose. The construction standard, however, also permits splices that are insulated as well as the original cable.*

Is the operator required to report any equipment defects or safety hazards and to discontinue use until safety has been assured? [29 CFR 1910.254(d)(9)(i) and 1926.351(d)(4)]

Are arc-welding machines repaired only by qualified personnel? [29 CFR 1910.254(d)(9)(i)]

If arc-welding machines become wet, are they thoroughly dried and tested before use? [29 CFR 1910.254(d)(9)(ii)]

Is dipping hot electrode holders into water prohibited? [29 CFR 1926.351(d)(2)]

Are cables with damaged insulation or exposed bare conductors replaced? [29 CFR 1910.254(d)(9)(iii)]

***Note:** The construction standard 1926.351(b)(4) permits repair of cables with rubber and friction tape or other equivalent means as long as the areas are protected by sufficient insulation.*



When metal-arc welding with inert gas, are special precautions taken for hazards associated with chlorinated solvents? [29 CFR 1926.353(d)(1)(i)]

***Note:** Inert-gas metal-arc welding produces 5 to 30 times more ultraviolet radiation than shielded metal-arc welding. The ultraviolet rays cause the decomposition of chlorinated solvents, liberating toxic fumes and gases. When in use, chlorinated solvents must be kept at least 200 feet away from the exposed arc (unless shielded) and surfaces prepared with chlorinated solvents must be thoroughly dry before welding is permitted. In addition, the shading density for filter lenses must be increased. All skin must be covered to protect against flashes and radiant energy.*

### **Welding with Resistance Welding Equipment**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.255 and 29 CFR 1910.306. It applies to the use of resistance welding equipment. **This checklist must be used with the Welding, Cutting, and Brazing--General Requirements checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA, and U.S. Environmental Protection Agency (EPA) standard, or with a non-regulatory recommendation.

#### **General**

Is all resistance welding equipment installed by a qualified electrician? [29 CFR 1910.255(a)(1)]

Is a disconnecting switch, circuit breaker, or circuit interrupter located at or near each resistance welding machine that can isolate the machine from the supply circuit? [29 CFR 1910.255(a)(1) and 29 CFR 1910.306(d)(2)]

Do ignition tubes that are used in resistance welding equipment have a thermal protection switch? [29 CFR 1910.255(a)(2)]

Are employees and students trained and judged competent to operate resistance-welding equipment? [29 CFR 1910.255(a)(3)]

Are controls of automatic or air and hydraulic clamps arranged or guarded to prevent unintentional operator activation? [29 CFR 1910.255(a)(4)]

#### **Spot- and Seam-Welding Machines (non-portable)**

Are external weld initiation control circuits of non-portable spot- and seam-welding machines limited to 120 volts? [29 CFR 1910.255(b)(1)]

Are welding machine cabinet doors electrically interlocked to interrupt power, short circuit all capacitors, or otherwise prevent access to live electrical equipment? [29 CFR 1910.255(b)(2) and (3)]

Are press welding machines effectively guarded to prevent operator hand injury? [29 CFR 1910.255(b)(4)]

Are point-of-operation shield guards and fire-resistant curtains installed to protect students, employees, or passers-by from flying sparks? [29 CFR 1910.255(b)(5)]

Are foot switches guarded to prevent unintentional machine operation? [29 CFR 1910.255(b)(6)]

Are two or more safety emergency stop buttons provided on all special multi-spot welding machines, including two-post and four-post weld presses? [29 CFR 1910.255(b)(7)]

Are secondary welding transformers that are used in multi-spot, projection, and seam welding machines grounded where possible? [29 CFR 1910.255(b)(9)]

### ***Portable Welding Machines***

Are portable welding guns suitably counterbalanced for supporting the guns (including cables), unless the design of the gun or fixture makes counterbalancing impractical or unnecessary? [29 CFR 1910.255(c)(1)]

Are portable welding machines that are suspended from overhead structures equipped with safety chains or cables? [29 CFR 1910.255(c)(2)]

Are initiating switches guarded to prevent unintentional operator activation? [29 CFR 1910.255(c)(4)]

Does the movable holder, where it enters the gun frame, have sufficient clearance to prevent fingers from being cut when they are placed on the operating movable holder? [29 CFR 1910.255(c)(5)]

Are the secondary and case of all portable welding transformers grounded? [29 CFR 1910.255(c)(6)]

### ***Flash-Welding Equipment***

Are flash-welding machines equipped with a hood to control flying flash? [29 CFR 1910.255(d)(1)]

Are fire-resistant curtains or suitable shields set up around the machine to protect the operators of nearby equipment? [29 CFR 1910.255(d)(2)]

Are fire-resistant curtains or suitable shields set up around the machine in a manner that does not hamper the operator's movements? [29 CFR 1910.255(d)(2)]

Are periodic inspections of welding equipment performed by qualified maintenance personnel? [29 CFR 1910.255(e)]

Is a certification record of periodically inspected welding equipment maintained? [29 CFR 1910.255(e)]

Does the certification record of periodically inspected welding equipment include the date of inspection, signature of the inspector, and equipment serial number or other identifier? [29 CFR 1910.255(e)]

### ***Maintenance***

Are welding machine operators required to report any equipment defect to his or her supervisor? [29 CFR 1910.255(e)]

Is defective equipment taken out of service until repairs have been completed? [29 CFR 1910.255(e)]

### **Welding, Cutting, and Brazing-General Requirements**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.25 and the construction standards 29 CFR 1926.351, 1926.352, 1926.353, and 1926.354. The checklist applies to operations involving welding, cutting, brazing, and heating. This checklist does not cover in detail regulations dealing with work in confined or enclosed spaces. If these conditions are encountered, please consult 29 CFR 1910.146, 1910.252, and 1926.353. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a non-regulatory recommendation.



Questions marked with this symbol may require the help of an outside expert.

### ***Fire Prevention and Protection***

Are all moveable fire hazards and combustibles moved to at least 35 feet away from areas or objects to be welded? [29 CFR 1910.252(a)(1)(i) and 1910.252(a)(2)(vii) and 1926.352(a)]

When welding or cutting operations are performed within 35 feet of combustible materials or floor, ceiling, or wall openings, are guards, barriers, or other precautions used to confine heat sparks and slag? [29 CFR 1910.252(a)(1)(ii), 29 CFR 1910.252(a)(2)(iii)(A), and 1926.352(b)]

Note: If all fire hazards cannot be removed or when the floor, ceiling, or wall has openings, special precautions listed in 1910.252(a)(2) and 1926.352(e) and (f) may be necessary. These requirements include having fire watchers present during and up to 30 minutes after the job is done; having an inspection conducted before beginning work; covering or wetting combustible materials; relocating combustibles; and covering or shutting down ventilation ducts and conveyors. In some cases, welding or cutting is prohibited if sprinkler systems

are  
inoperable or unusual fire and explosion hazards exist.

Is welding prohibited where flammable materials are used (such as paints) or where heavy dust concentrations are present? [29 CFR 1926.352(c)]

Is suitable fire extinguishing equipment kept where welding or cutting is done? Is this equipment ready for instant use? [29 CFR 1910.252(a)(2)(ii) and 1926.352(d)]

When students or employees weld or cut containers such as barrels or tanks, are the containers thoroughly cleaned to remove materials that, when heated, may cause fire, explosion, or release of toxic materials? [29 CFR 1910.252(a)(3)(i) and 1926.352(i)]

Note: The construction regulations in 1926.352(i) also permit barrels or tanks to be filled with water as an alternative to cleaning.

Before welding or cutting containers, are all hollow spaces and cavities vented to release trapped air or gases?  
[29 CFR 1910.252(a)(3)(ii) and 1926.352(j)]

*Note: Purging with inert gas is recommended.*

### ***Protection of Personnel***

Are welding cables and hoses kept clear of passageways, ladders, and stairways?  
[29 CFR 1910.252(b)(1)(ii)]

Are welders, cutters, brazers, and helpers given suitable face, neck, and ear protection to prevent direct radiant energy from the arc? [29 CFR 1910.252(b)(2)(ii)(B)]

Are welders, cutters, brazers, and helpers given suitable eye protection with proper filter lens shade numbers? [29 CFR 1910.252(b)(2) and 1926.353(e)(2)]

*Note: The following is a guide for selecting proper shade numbers. These recommendations may vary to suit individual needs: [29 CFR 1910.252(b)(2)(ii)(H)]*

<b>Welding Operations*</b>	<b>Shade No.</b>
Shielded metal-arc welding: 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	10
Gas-shielded arc welding (nonferrous): 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	11
Gas-shielded arc welding (ferrous):	12

1/16-, 3/32-, 1/8-, 5/32-inch electrodes	
Shielded metal-arc welding:	12
3/16-, 7/32-, 1/4-inch electrodes	14
5/16-, 3/8-inch electrodes	10-14
Atomic hydrogen welding	14
Carbon arc welding	2
Soldering	3 or 4
Torch brazing	3 or 4
Light cutting, up to 1 inch	4 or 5
Medium cutting, 1 inch to 6 inches	5 or 6
Heavy cutting, 6 inches and over	4 or 5
Gas welding (light) up to 1/8 inch	5 or 6
Gas welding (medium) 1/8 inch to 1/2 inch	6 or 8
Gas welding (heavy) 1/2 inch and over	

*\*Note: In gas welding or oxygen cutting in which the torch produces a high yellow light, use a filter or lens that absorbs the yellow or sodium line in the visible light of the operation.*

Are employees and students who are welding on platforms, scaffolds, or runways protected from falls by railings, lifelines, or safety belts? [29 CFR 1910.252(b)(1)(i)]

When the work permits, are welders enclosed in an individual noncombustible booth or screened-in area with an internal, non-reflective surface? [29 CFR 1910.252(b)(2)(iii) and 1926.351(e)]

Do booths and screens permit air circulation at the floor level? [29 CFR 1910.252(b)(2)(iii) and (c)(1)(ii)]

*Note: At least 2 feet of space is recommended at the bottom.*

Are employees and students working nearby protected from arc welding rays by screens, booths, or shields?  
[29 CFR 1910.252(b)(2)(iii)]

Are employees and students given personal protective clothing to prevent injury from welding hazards? [29 CFR 1910.252(b)(3)]



Are all welding operations in confined spaces done with careful consideration to space ventilation, respiratory protection, rescue, escape, atmospheric testing, and personnel training? [29 CFR 1910.252(b)(4)]



Have all operations involving the welding, cutting, or heating of metals containing lead, cadmium, mercury, or beryllium been evaluated to determine if respiratory protection is required? [29 CFR 1926.353(c)]

## ***Health Protection and Ventilation***



Is local or general exhaust ventilation provided during welding to maintain concentrations of toxic materials such as fluorides, cadmium, zinc, beryllium, lead, or mercury within acceptable limits? [29 CFR 1910.252(c) and 1926.353(a)(2)]

Do the suppliers of fluxes, coatings, coverings, and filler metals supply information about the hazardous releases associated with these materials? [29 CFR 1910.252(c)(1)(iv)]

**Note:** Check the MSDS (material safety data sheet) for information.

Is mechanical ventilation provided when there is less than 10,000 cubic feet of space per welder? [29 CFR 1910.252(c)(2)(i)(A)]

Is mechanical ventilation provided when the ceiling height is less than 16 feet? [29 CFR 1910.252(c)(2)(i)(B)]

Is contaminated air exhausted from a working space discharged into the open air and away from sources of fresh intake air? [29 CFR 1926.353(a)(4)]

Is first aid equipment for welders immediately available at all times? [29 CFR 1910.252(c)(13)]

## ***Welding, Cutting, and Heating of Coatings***

Is the welding, cutting, or heating of surfaces covered by a preservative coating prohibited unless the flammability of the coating has been evaluated by a competent person? [29 CFR 1926.354(a)]

**Note:** Preservative coatings shall be considered highly flammable when scrapings burn quickly.

Are highly flammable coatings stripped from the area to be heated? [29 CFR 1926.354(b)]

Have preservative coatings been stripped from the object so that the temperature of the un-stripped metal will not be appreciably raised? [29 CFR 1926.354(d)]

Are toxic preservative surfaces removed to at least 4 inches away from the area of heat application, or is suitable respiratory protection provided? [29 CFR 1926.354(c)]

## **Woodworking Machinery General Requirements**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.213 and the construction standard 29 CFR 1926.304. It applies to all wood working machinery. **This checklist must be used in conjunction with the Machines--General Requirements checklist.** The

regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA, and EPA standard, or with a non-regulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

### ***General Machine Construction***

Is each machine constructed and installed so it is free from sensible vibration when the largest tool is mounted and run at full speed? [29 CFR 1910.213(a)(1)]

Are arbors and mandrels constructed to have firm and secure bearing and be free from play? [29 CFR 1910.213(a)(2)]

Are saw frames on tables constructed with lugs cast on the frame or with equivalent means to limit the size of the saw blade that can be mounted? [29 CFR 1910.213(a)(5)]

***Note:*** *This is done to avoid over speed caused by mounting a saw larger than intended.*

Are circular saw fences constructed so they can be firmly secured to the table without changing their alignment with the saw? [29 CFR 1910.213(a)(6)]

Are circular saw gauges constructed so they slide in grooves or tracks that are securely machined, to ensure exact alignment with the saw for all positions on the guide? [29 CFR 1910.213(a)(7)]

Are hinged table saws constructed so that the table can be firmly secured in any position and in true alignment with the saw? [29 CFR 1910.213(a)(8)]

Are all belts, pulleys, gears, shafts, and moving parts guarded? [29 CFR 1910.213(a)(9)]

Is each woodworking machine provided with a disconnect switch that can be locked in the off position? [29 CFR 1910.213(a)(10) and 1926.304(a)]

***Note:*** *The construction standard 1926.304 permits a disconnect switch that can be tagged in the off position.*

Are the frames of all exposed non-current-carrying metal parts grounded? [29 CFR 1910.213(a)(11)]

If the possibility exists of contacting part of a circular saw either beneath or behind the table, is that part covered with either an exhaust hood or guard? [29 CFR 1910.213(a)(12)]

Are revolving double arbor saws fully guarded? [29 CFR 1910.213(a)(13)]

Is the placement and mounting of saws, cutter heads, or tool collars on machine arbors accomplished when the tool has been accurately machined to size and shape to fit the arbor? [29 CFR 1910.213 (a)(14)]

Are combs (feather-boards) or suitable jigs provided at the shop or lab for use when a standard guard cannot be used, as in **dadoing, grooving, joining, moulding, and rabbetting**? [29 CFR 1910.213(a)(15)]

Is the operating speed etched or otherwise permanently marked on all circular saws over 20 inches in diameter and operating at over 10,000 peripheral feet per minute? [29 CFR 1926.304(b)]

Do woodworking tools and machinery meet the American National Standards Institute (ANSI) codes for safety? [29 CFR 1926.304(f)]

***Note:** A label on the equipment or manufacturer's literature might indicate that it meets ANSI's standards. In case of doubt, the manufacturer of the equipment should be contacted.*

### ***Machine Controls and Equipment***

Are mechanical or electrical power controls provided on each machine to make it possible for the operator to cut off the power without leaving his or her operating position? [29 CFR 1910.213(b)(1)]

On machines driven by belts and shaftings, is a locking-type belt shifter or equivalent positive device used?  
[29 CFR 1910.213(b)(2)]

Is each operating treadle protected against unexpected tripping? [29 CFR 1910.213(b)(6)]

Are automatic feeding devices installed on machines whenever the nature of the work permits? [29 CFR 1926.304(c)]

Do feeder attachments have the feed rolls or other moving parts covered or guarded to protect the operator from hazardous points? [29 CFR 1910.213(b)(7) and 1926.304(c)]

### ***Inspection and Maintenance of Woodworking Machinery***

Are dull, badly set, improperly filed, or improperly tensioned saws immediately removed from service before they cause the material to stick, jam, or kickback when it is fed to the saw at normal speed? [29 CFR 1910.213(s)(1)]

Are saws with adhered gum cleaned immediately? [29 CFR 1910.213(s)(1)]

Are all knives and cutting heads of woodworking machines kept sharp, properly adjusted, and firmly secured? [29 CFR 1910.213(s)(2)]



Are all bearings well lubricated and kept free from lost motion? [29 CFR 1910.213(s)(3)]

Are arbors of circular saws free from play? [29 CFR 1910.213(s)(4)]

Is sharpening or tensioning of saw blades or cutters done only by people with demonstrated skill in this kind of work? [29 CFR 1910.213(s)(5)]

Is cleanliness maintained around woodworking machinery so guards function properly and fire hazards are prevented in switch enclosures, bearings, and motors? [29 CFR 1910.213(s)(6)]

Are all cracked saws immediately removed from service? [29 CFR 1910.213(s)(7)]

***Note:** Dispose of cracked saws in a manner that will prevent injury to anyone handling the discarded saws.*

Is inserting wedges between the saw disk and the collar to form what is commonly known as a **wobble saw** prohibited? [29 CFR 1910.213(s)(8)]

Are push sticks or blocks provided at workplaces in several sizes and types suitable for the work to be done?  
[29 CFR 1910.213(s)(9)]

### ***Definitions:***

**Dadoing:** cutting a rectangular groove across the width of a board or plank.

**Grooving:** cutting a hollow channel into a piece of wood.

**Joining:** cutting a piece of wood or plank to have it join exactly with another piece of wood or plank.

**Moulding:** cutting or working a piece of wood on its side or edge to a uniform cross section other than rectangular, to give it an ornamental effect.

**Rabbetting:** cutting a rectangular, longitudinal groove in the corner edge of a board or plank in order to have it join with another board or plank.

### **Woodworking Machinery other than Saws**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.213. It applies to the following: jointers; tenoning machines, boring and mortising machines; wood shapers and similar equipment; planing, molding, sticking, and matching machines; profile and swing-head lathes and wood-heel turning machines; sanding machines; veneer cutters and wringers; and miscellaneous woodworking machines. **This checklist must be used in conjunction with the Woodworking Machinery General Requirements**

**checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a non-regulatory recommendation.

### ***Jointers***

Is each hand-fed planer or jointer with a horizontal head equipped with a cylindrical cutting head? [29 CFR 1910.213(j)(1)]

***Note:** The knife projection of the cylindrical cutting head cannot exceed 1/8 inch beyond the cylindrical body of the head.*

Is the opening in the table kept as small as possible? [29 CFR 1910.213(j)(2)]

***Note:** The clearance between the edge of the rear table and the cutting head shall be 1/8 inch or less. The table throat opening shall not be more than 1-1/2 inches when tables are set or aligned with each other for a zero cut.*

Does each hand-fed jointer with a horizontal cutting head have an automatic guard that covers all sections of the head on the working side of the fence or gauge? [29 CFR 1910.213(j)(3)]

***Note:** The guard must automatically adjust itself to cover the unused portion of the head and shall remain in contact with the material at all times.*

Does each hand-fed jointer with a horizontal cutting head have a guard that covers the section of the head back to the gauge or fence? [29 CFR 1910.213(j)(4)]

Does each wood jointer with a vertical head have either an exhaust hood or other guard arranged so it completely encloses the revolving head, except for a slot wide enough for the material to be jointed? [29 CFR 1910.213(j)(5)]

Is the knife blade of jointers installed and adjusted so that it does not protrude more than 1/8 inch beyond the cylindrical body of the head? [29 CFR 1910.213(s)(12)]

### ***Tenoning Machines***

Are feed chains and sprockets of double-end tenoning machines completely enclosed, except for the portion of chain used for conveying the stock? [29 CFR 1910.213(k)(1)]

Are sprockets and chains at the rear ends of frames guarded at the sides by plates projecting beyond the edges of sprockets and lugs? [29 CFR 1910.213(k)(2)]

If used on tenoning machines, are cutting heads and saws covered by metal guards? [29 CFR 1910.213(k)(3)]

**Note:** *The guards must cover at least the unused part of the periphery of the cutting head. If the guard is made of sheet metal, the material used must be at least 1/16 inch thick, and if it is cast iron, it must be at least 3/16 inch thick.*

If an exhaust system is used on a tenoning machine, is the guard part of the exhaust hood? [29 CFR 1910.213(k)(4)]

### ***Boring and Mortising Machines***

Are safety-bit chucks with projecting-set screws prohibited? [29 CFR 1910.213(l)(1)]

Are boring bits provided with a guard that encloses all portions of the bit and chuck above the material being worked? [29 CFR 1910.213(l)(2)]

Is the top of the cutting chain and driving mechanism enclosed? [29 CFR 1910.213(l)(3)]

When a counterweight is used, is one of the following (or equivalent means) used to prevent its dropping? [29 CFR 1910.213(l)(4)]

It is bolted to the bar by a bolt passing through both bar and counterweight

A bolt is put through the extreme end of the bar

Where the counterweight does not encircle the bar, a safety chain is attached to it.

Other types of counterweights are suspended by chain or wire rope and shall travel in a pipe (or other suitable enclosure) if they might fall and cause injury.

Are universal joints on spindles of boring machines completely enclosed to prevent contact by the operator? [29 CFR 1910.213(l)(5)]

Is each operating treadle covered by an inverted U-shaped metal guard, fastened to the floor, and of adequate size to prevent tripping? [29 CFR 1910.213(l)(6)]

### ***Wood Shapers and Similar Equipment***

Is the cutting head of each wood shaper or hand-fed panel raiser (or other similar machine that is not automatically fed) enclosed with a cage or adjustable guard designed to keep the operator's hand away from the cutting edge? [29 CFR 1910.213(m)(1)]

### ***Planing, Molding, Sticking, and Matching Machines***

Is each planing, molding, sticking, and matching machine equipped with a metal guard covering the cutting heads? [29 CFR 1910.213(n)(1)]

When an exhaust system is used, does the guard form part of the exhaust hood? [29 CFR 1910.213(n)(2)]

**Note:** *If the guard is constructed of sheet metal, the material used shall be at least 1/16 inch thick, and if it is constructed of cast iron, it must be at least 3/16 inch thick.*

Are feed rolls guarded by a hood or suitable guard to prevent the hands of the operator from contacting the in-running rolls? [29 CFR 1910.213(n)(3)]

Do the surfaces and planers (provided with the sectional in-feed rolls) give sufficient feeding contact pressure on the stock thickness? [29 CFR 1910.213(n)(4)]

### ***Profile and Swing-Head Lathes and Wood Heel Turning Machine***

Are the cutting heads of each profile and swing-head lathe covered by a metal guard? [29 CFR 1910.213(o)(1)]

Are cutting heads on wood-turning lathes covered as much as possible by hoods or shields? [29 CFR 1910.213(o)(2)]

Do the following have hoods enclosing the cutter blades completely? (except at the contact points where the stock is being cut): shoe last and spoke lathes, doweling machines, wood heel-turning machines, and other automatic wood-turning lathes of the rotating knife type. [29 CFR 1910.213(o)(3)]

Are lathes used for turning long pieces of wood stock held only between the two centers equipped with long, curved guards extending over the tops of the lathe? [29 CFR 1910.213(o)(4)]

**Note:** *This is to prevent the work pieces from being thrown out of the machine if they become loose.*

When an exhaust system is used, does the guard form part or all of the exhaust hood? [29 CFR 1910.213(o)(5)]

**Note:** *If the guard is constructed of sheet metal, the material used must be at least 1/16 inch thick, and if it is constructed of cast iron, it must be at least 3/16 inch thick.*

### ***Sanding Machines***

Are the feed rolls of self-feeding sanding machines protected with a semi-cylindrical guard to prevent contact with the in-running rolls? [29 CFR 1910.213(p)(1)]

Does the bottom guard come to within 3/8 inch of a plane formed by the bottom or contact face of the feed roll where it touches the stock? [29 CFR 1910.213(p)(1)]

Is each drum-sanding machine equipped with an exhaust hood or other guard if no exhaust hood is required? [29 CFR 1910.213(p)(2)]

Does each disk-sanding machine enclose the revolving disk (except for the portion of the disk above the table if a table is used)? [29 CFR 1910.213(p)(3)]

Is each belt-sanding machine provided with guards at each nip point where the sanding belt runs onto a pulley? [29 CFR 1910.213(p)(4)]

### ***Veneer Cutting and Wringers***

Are veneer-slicer knives guarded at the front and rear to prevent contact with the knife edge? [29 CFR 1910.213(q)(1)]

Do veneer clippers have automatic feeds, or are they provided with a guard that makes it impossible to place a finger or fingers under the knife while feeding or removing the stock? [29 CFR 1910.213(q)(2)]

Are sockets on chain or slat-belt conveyors enclosed? [29 CFR 1910.213(q)(3)]

Are hand and foot power guillotine veneer cutters provided with rods or plates or other satisfactory means, arranged on the feeding side so that the hands cannot reach the cutting edge of the knife while feeding or holding the stock in place? [29 CFR 1910.213(q)(4)]

Is the operator required to make sure that the machine is clear and that other people are not in a hazardous position before starting or restarting the machine? (for example, when veneer slicers or rotary veneer-cutting machines have been shut down to insert logs or to make adjustments) [29 CFR 1910.213(s)(13)]

### ***Miscellaneous Woodworking Machinery***

Are the feed rolls of roll-type glue spreaders guarded by a semi-cylindrical guard? [29 CFR 1910.213(r)(1)]

***Note:** The bottom of the guard shall come to within 3/8 inch of a plane formed by the bottom or contact face of the feed roll where it touches the stock.*

Is each point of operation for combination or universal woodworking machines guarded as required for such a tool in a separate machine? [29 CFR 1910.213(r)(3)]

### **Woodworking Machinery Saws**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.213. It applies to hand-fed ripsaws, hand-fed crosscut table saws, circular re-saws, self-feed circular saws, swing cutoff saws, sliding cutoff saws, band-saws, and band re-saws. **This checklist must be used in conjunction with the Woodworking Machinery--General Requirements checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer

to a question indicates that this portion of the inspection complies with the OSHA and EPA standard, or with a non-regulatory recommendation.

### ***Hand-Fed Ripsaws***

Is each circular hand-fed rip saw guarded by a hood that completely encloses the portions of the saw that are above the table and above the material being cut? [29 CFR 1910.213(c)(1)]

Is the hood and mounting arranged so that the hood will automatically adjust itself to the thickness of the material and remain in contact with the material being cut? [29 CFR 1910.213(c)(1)]

***Note:** The hood should not offer considerable resistance to insertion of the material.*

Is each hand-fed circular rip saw furnished with a spreader to prevent material from squeezing the saw or being thrown back on the operator? [29 CFR 1910.213(c)(2)]

Is each hand-fed circular rip saw provided with non-kickback fingers or dogs located to oppose the thrust or tendency of the saw to pick up the material or throw it back toward the operator? [29 CFR 1910.213(c)(3)]

### ***Hand-Fed Crosscut Table Saws***

Is each hand-fed crosscut table saw guarded by a hood that completely encloses portions of the saw that are above the table and above the material being cut? [29 CFR 1910.213(d)(1)]

Is the hood and mounting arranged so that the hood will automatically adjust itself to the thickness of and remain in contact with the material being cut? [29 CFR 1910.213(d)(1)]

***Note:** The hood should not offer considerable resistance to insertion of the material.*

### ***Circular Re-saws***

Is each circular re-saw guarded by a hood or shield of metal above the saw? [29 CFR 1910.213 (e)(1)]

Does each circular re-saw have a spreader fastened securely behind the saw? [29 CFR 1910.213(e)(2)]

### ***Self-Feed Circular Saws***

Are feed rolls and saws protected by a hood or guard to prevent the hands of the operator from coming into contact with the in-running rolls at any point? [29 CFR 1910.213(f)(1)]

**Note:** The guard must be constructed of heavy material (preferably metal), and the bottom of the guard must come down to within 3/8 inch of the plane formed by the bottom or working surfaces of the feed rolls. This distance may be increased to 3/4 inch, provided the lead edge of the hood is extended to at least 5-1/2 inches in front of the nip point between the front roll and the work.

Is each self-feed circular rip saw provided with sectional non-kickback fingers for the full width of the feed rolls? [29 CFR 1910.213(f)(2)]

### ***Swing and Sliding Cutoff Saws***

Are swing and sliding cutoff saws provided with a hood that completely encloses the upper half of the saw, the arbor end, and the point of operation at all positions of the saw? [29 CFR 1910.213(g)(1)]

**Note:** The hood must be constructed to protect the operator from flying splinters and broken saw teeth. It must automatically cover the lower portion of the blade so that when the saw is returned to the back of the table, the hood will rise on top of the fence, and when the saw is moved forward, the hood will drop on top of and remain in contact with the table or material being cut.

Are swing and sliding cutoff saws equipped with an effective device to return the saw automatically to the back of the table when released at any point of its travel? [29 CFR 1910.213(g)(2)]

Are swing and sliding cutoff saws equipped with limit chains or other equally effective devices to prevent the saw from swinging beyond the front or back edges of the table, or beyond a forward position where the gullets of the lowest saw teeth rise above the table top? [29 CFR 1910.213(g)(3)]

Are inverted swing cutoff saws provided with a hood that covers the part of the saw that protrudes above the table or above the material being cut? [29 CFR 1910.213(g)(4)]

**Note:** The hood must automatically adjust itself to the thickness of the material and remain in contact with the material being cut.

### ***Radial Saws***

Does the upper hood completely enclose the upper portion of the blade down to the point that will include the end of the saw arbor? [29 CFR 1910.213(h)(1)]

Are the sides of the lower exposed portion of the blade guarded to the full diameter of the blade by a device that automatically adjusts itself to the thickness of the stock? Does this device remain in contact with the stock being cut to give maximum protection for the operation being performed? [29 CFR 1910.213(h)(1)]

Are radial saws used for ripping provided with non-kickback fingers or dogs located on both sides of the saw to oppose the thrust or tendency of the saw to throw material back toward the operator? [29 CFR 1910.213(h)(2)]

Is an adjustable stop provided that prevents the forward travel of the blade beyond the position necessary to complete the cut in repetitive operations? [29 CFR 1910.213(h)(3)]

Is the installation designed so that the front end of the unit is slightly higher than the rear? (This design causes the cutting head to return gently to the starting position when released by the operator) [29 CFR 1910.213(h)(4)]

***Note:** The cutting head should be fitted with an automatic return device.*

Is the direction of saw rotation conspicuously marked on the hood? [29 CFR 1910.213(h)(5)]

Is a permanent label (at least -1/2 inches by 3/4 inch) affixed to the rear of the guard at approximately the level of the arbor that reads as follows? **Danger: Do not rip or plow from this end** [29 CFR 1910.213(h)(5)]

#### ***Band-saws and Band Re-saws***

Are all portions of the band saws and band re-saws enclosed or guarded, except for the working portion of the blade between the bottom of the guide rolls and the table? [29 CFR 1910.213(i)(1)]

Does a self-adjusting guard raise and lower the guide? [29 CFR 1910.213(i)(1)]

Is each band saw machine provided with a tension control device to indicate the proper tension for the standard saws used on the machine? [29 CFR 1910.213(i)(2)]

Are feed rolls of band re-saws protected with a suitable guard to prevent the hands of the operator from coming in contact with the in-going rolls at any point? [29 CFR 1910.213(i)(3)]



## **4.4 Loss Control Audits, and Training Seminars**

### **Loss Control Audits**

The Risk Management Division conducts audits of state facilities to identify hazards, help implement loss prevention efforts, assess the adequacy of resources devoted to loss retention, and evaluate current loss prevention programs. The facility receives a written report of findings and recommendations resulting from the audit.

Contact the Risk Management Division to request a loss control audit.

### **Loss Control Training Seminars**

On request, Risk Management conducts training seminars on the following subjects:

#### **■ Workplace Safety**

The workplace safety seminar is designed to communicate the concepts of risk management and loss control as the responsibility and opportunity of each employee. Tailored to address specific agency or facility requirements, the seminar covers workplace ergonomics; hazardous materials handling; proper use of personal protective equipment; proper equipment use; methods of identifying and reporting accidents, incidents, and unsafe conditions; causes and costs of accidents; the role of loss control committees; and other topics.

#### **■ Management's Role in Risk Control**

Designed for management and supervisory personnel, this seminar addresses the objects and elements of a loss control program, risk management techniques, management's role in risk control programs, and how management can fulfill its role, including major targets for loss control and program elements.

#### **■ Liability of State Employees in North Dakota**

This seminar communicates the role and responsibility of the state employee involved in a lawsuit including an explanation of the indemnification and defense provided by the State; what an employee needs

to do if served with legal pleadings; conduct of the employee during a deposition or trial testimony.

## ■ Proper Incident Reporting Procedures

This seminar provides information on what, when, and how to properly report incidents that may result in a claim or lawsuit, that are important for proactive loss control, or are needed to properly document an incident in the workplace that does not require medical treatment at the time of the occurrence.

## ■ On-Line Training

Risk Management has developed an on-line web based system that can be used as a tool to enhance your entity's training program. Employees can complete various training modules from the convenience of a workstation. The On-Line Training provides documentation of the training.

The On-Line training modules are continuously updated and revised. Check the Risk Management web site Online Training site for the latest list of modules. Examples of modules available are:

- Medical Documentation
- Incident Reporting - Workers Compensation
- Incident Reporting - Risk Management Fund
- Substance Abuse 2003
- Ergonomics - Preventing Back Injuries
- Harassment in the Workplace
- Workers Compensation
- Safe Van Operations
- Computer Ergonomics
- Office Safety
- Substance Abuse for Non-Supervisors
- Substance Abuse for Supervisors
- Supervisor's Guide: Responding to Allegations
- Differences Between FMLA, ADA and Workers Compensation

Agencies requiring training assistance related to risk management issues should contact the Risk Management Division.

## **4.5 Fire Emergency, Natural Disaster/Severe Weather, and Bomb Threat Policies and Procedures**

Having plans in place for dealing with fire emergencies, natural disasters, and man-made disasters is critically important to preventing the loss of life and controlling injury to people and damage to property. The steps for establishing each kind of plan are outlined below, followed by the specific information about each plan that should be periodically communicated to all employees. The plan should be updated whenever changes make it necessary and should be tested by actual drills.

The suggested procedures and plans in this section serve only as a guide and are not intended to be anything more. The ultimate determination of how to handle emergency situations must be made by the individual responsible for the threatened facility.

All personnel should know exactly what to do in the event of an emergency because time counts – and you may only have seconds. All personnel should know the established plans and review them from time to time.

### **Fire Emergency Procedure:**

Develop guidelines for establishing an effective fire emergency plan for your facility based on the following criteria:

- 1) Has the following emergency evacuation information been identified and the location indicated on a diagram?
  - a) Evacuation routes
  - b) Primary and secondary fire exits
  - c) Each first aid station or kit
  - d) Each fire alarm
  - e) Each fire extinguisher
  - f) The nearest public telephone
  - g) The location of the stairway
- 2) Has the diagram been posted in every room, hallway, and in public areas indicating this emergency evacuation information?
- 3) Is the following information included in the plan?
  - a) The preferred means of reporting fires and other emergencies (telephone, pull alarm system, etc.).

- b) Elevators are not to be used.
  - c) Evacuation routes must be unobstructed by boxes, furniture, and other obstacles at all times.
  - d) Doors in evacuation routes must be unlocked and unobstructed at all times. Doors can be locked on the outside if approved panic hardware is installed.
  - e) Identify the location of all flammables and combustibles on the premises so the areas where they are stored are not included in evacuation routes.
- 4) What method do you employ to alert all persons in the building?
- a) Telephone
  - b) Intercom system
  - c) Voice
  - d) Other
- 5) Is there a backup to the alert system that does not require electricity? Electricity may be lost during a fire.
- 6) Have meeting places been established outside and employees been instructed as to which place they should report?
- 7) Are disabled persons on staff or potential visitors to the building? Or, is there anyone not in a position to hear the warning or alert or unable to respond on their own accord? Assign an employee to each person with special needs, ensuring that the individual arrives at a place of safety.
- 8) Have personnel been designated to do the following?
- a) Ensure that evacuation is complete by checking areas where the alarm may not have been heard, such as rest rooms and storage areas.
  - b) Account for the presence of the employees. The report should take place outside, at the meeting places.
- 9) Have employees been instructed to report any unsafe condition within your building or any safety equipment that is not functioning properly, such as the following?
- a) Locked exit doors.
  - b) Blocked corridors.
  - c) Combustible storage in corridors.
  - d) Burned out exit lights.
  - e) Emergency lighting not working.
  - f) Fire alarm components not functioning.

- 10) Have employees with hearing, vision or physical impairments been involved in evacuation planning?
- 11) Have fire emergency drills been conducted regularly, and all employees and other building occupants been required to participate in the drills, to follow instructions of the fire emergency procedure exactly, and to respond as if they were in actual fires?
- 12) Are all employees acquainted with the sound of the fire alarms and their locations and the emergency communication system? Instruct employees to respond immediately to the sound of the alarm and/or emergency communications.
- 13) Are employees instructed that they must resist any temptation to go back into a burning building once they are safely out? If someone is trapped inside, firefighters are equipped and trained for rescues and they have the best chance of helping the trapped person.
- 14) Are local fire department personnel involved to keep your workplace fire emergency plan up to date?
- 15) Have the fire emergency procedures been communicated to all new employees at their orientation and reviewed annually with all employees at a staff safety meeting?
- 16) Has each employee been provided a copy of the written fire emergency procedure?
- 17) Is the written plan kept at the workplace and made available for employee review?

Additional fire prevention information may be obtained from the checklists found in Section 4.3 of the manual.

Note: N.D.C.C. § 18-08-12 provides in part: “An annual fire inspection shall be performed at each state institution and building... shall be made by the fire department of the city or fire protection district in which the institution or building is located, at the direction of the officer in charge of the institution or building, who shall prepare a report based upon the findings of the fire inspection...”

Document your developed plan as an Emergency Fire Plan and communicate it to your employees

## **SAMPLE PLAN:**

### **EMERGENCY FIRE PLAN**

- 1) Familiarize yourself with the location of the evacuation routes (primary and secondary), first aid station or kit, each fire alarm, each fire extinguisher, the nearest public telephone, and the location of the stairway (as indicated on the Emergency Evacuation Diagrams).
- 2) Should you discover fire anywhere in the building, immediately activate the nearest fire alarm pull box and call the fire department (911 if available). State your name, location, and type of fire.
- 3) Only consider attempting to extinguish a fire if it is very minor and you have been trained in the proper operation and use of portable fire extinguishers.
- 4) Take only personal items, **IF** there is time.
- 5) When the fire alarm sounds, immediately leave the area using your designated evacuation route.
- 6) When evacuating do not use elevators, keep to the right, walk – do not run, and remain calm but take immediate action.
- 7) Stay in single file in the stairways, as fire department personnel may be coming up the same stairway.
- 8) A preplanned procedure has been established to assist non-ambulatory individuals.
- 9) Obey the directions of your building Emergency Response Officials.
- 10) Small fires can spread rapidly and overwhelm an area. To contain the fire, close all doors behind you as you exit the building.
- 11) Before opening any door of a room or office that leads to the main hallway feel the door first to see if it is hot.
  - a) If the door is not hot, open it slowly.
  - b) Then if conditions allow, proceed to the nearest stairway and follow the evacuation plan.
  - c) If smoke is too heavy, do not enter a hallway.

- d) Close the door, place a towel or article of clothing along the bottom edge of the door.
  - e) Open the windows for fresh air and hang a sheet, or other similar article, out the window to let the fire department know you are still inside.
- 12) If all exits from a floor are blocked or if for any reason you must remain in a room/office during a fire or other emergency, remain calm, call 911 (if available) and advise of your location and situation. Wait for the fire department to assist you.
- 13) Notify your supervisor in the event of injury to individuals.
- 14) Periodic fire drills will be conducted throughout the year; however, treat every alarm as if it were an actual fire.
- 15) After exiting the building get far away from the building, **all staff members are to assemble in the \_\_\_\_\_ for accountability.** You should remain outside the building until the Fire Department or management staff informs you that it is safe to return to the building.

## **Natural Disaster/Severe Weather Procedure:**

Develop guidelines for establishing an effective natural disaster/severe weather emergency plan for your facility based on the following criteria:

- 1) Who is responsible for activating the plan?
- 2) Is there an alternate responsible individual?
- 3) What is/are the primary means of receiving tornado information?
  - a) Consider purchasing a sufficient number of National Oceanic and Atmospheric Administration Weather Radios (NWR) as a primary means to alert your staff to receive tornado information and initiate emergency severe weather procedures (battery backup feature is recommended.)
  - b) Local radio stations carrying weather information as well as the Emergency Alert System.
  - c) City Warning Sirens.
- 4) What method do you employ to alert all persons in the building?
  - a) Telephone
  - b) Intercom system
  - c) Voice
  - d) Other
- 5) Is there a backup to the alert system that does not require electricity? Electricity may be lost as the storm approaches.
- 6) Have employees with hearing, vision or physical impairments been involved in evacuation planning?
- 7) Are disabled persons on staff or potential visitors to the building? Or is there anyone not in a position to hear the warning or alert or unable to respond on their own accord? Assign an employee to each person with special needs, ensuring that the individual arrives at a place of safety.
- 8) Where are the building's safest areas?
  - a) Designate an area in the office/building as a shelter such as a basement that is accessible at all times.
  - b) Assuming no underground shelter is available, the safest places to be in a building include:
    - i) Interior hallway on the lowest level.



- ii) Away from windows.
  - iii) In a small room, such as a bathroom, surrounded by load-bearing walls.
  - iv) In a room without small objects that can serve as projectiles (such as tableware).
- 9) Is a posted Tornado Shelter Route diagram posted in every room and hallway?
- 10) Are all employees acquainted with the emergency communication system? Instruct employees to respond immediately to the sound of the alarm and/or emergency communications.
- 11) Have personnel been designated to do the following?
- a) Ensure that evacuation is complete by checking areas where the alarm may not have been heard, such as restrooms and storage areas.
  - b) Account for the presence of the employees. The report should take place at the meeting places.
- 12) Did you consider:
- a) “Wind Tunnel Effect” – When blown by tornado-strength winds, debris (such as fragments of glass, wood, and metal) can cause serious injury when accelerated by relatively narrow hallways.
  - b) Gas leaks and electrical hazards after the storm. If detected, determine who is to notify gas company, electrical company, police or fire department to address the situation.
- 13) Have all emergency procedures been communicated to all new employees at their orientation and reviewed annually with all employees at a staff safety meeting?
- 14) Has each employee been provided a copy of the written Emergency Weather Plan?
- 15) Is the written plan kept at the workplace and made available for employee review?

Conduct tornado drills each tornado season. Review the plan on days when severe weather is forecast in your area.

Document your developed plan as an Emergency Weather Plan and communicate it to your employees.

## **SAMPLE PLAN:**

### **EMERGENCY WEATHER PLAN**

**Tornado Watch:** Conditions are right for a tornado to develop in the area, and one should be on the alert for further weather developments.

- 1) Familiarize yourself with the primary and secondary safe area locations and the emergency routes as indicated on the floor maps.
- 2) Tornado Watch will be announced to each department through telephone, intercom, or voice.
- 3) Depending on the severity of the weather, the watch period should be used to prepare for an easy transition into designated shelter areas. Review Tornado Warning procedures.
- 4) An announcement will be made to advise when the tornado watch is discontinued.

**Tornado Warning:** A tornado has been sighted or indicated by radar, usually within a ten mile radius of our location, and the following emergency procedures will be carried out to ensure safety.

- 1) When Tornado Warning has been announced to each department through telephone, intercom, or voice remain calm but take immediate action.
- 2) Personnel should walk, not run, to the designated area.
- 3) Close the doors of each room as they are evacuated.
- 4) Do not open windows in the building.
- 5) Do not attempt to leave the building.
- 6) Avoid all glass areas, doors, and entrances.
- 7) As severe weather clears and the “All Clear” announcement is made by the National Weather Service a verbal announcement will be made throughout the building.

- 8) Notify your supervisor in the event of injury to individuals or damage to the building.
- 9) After the disaster or emergency:
  - a) Use extreme caution in entering or working in buildings that may have been damaged or weakened, as they may collapse without warning.
  - b) Be aware of the possibility of gas leaks or electrical short circuits. If detected, notify gas company, electrical company, the police, or fire department. Don't go back into the building until you have been ensured it is safe by these officials.
  - c) Stay away from fallen or damaged electrical wires.
  - d) Stay away from disaster areas. Sightseeing will interfere with emergency operations, and may be dangerous.

## **Man-made Disaster Procedure:**

One point that cannot be overemphasized is the value of being prepared. Do not allow a bomb incident to catch you by surprise. By developing a bomb incident plan and considering possible bomb in your man-made disaster plan, you can reduce the potential for personal injury and property damage.

Physical security provides for the protection of property, personnel, facilities, and material against unauthorized entry, trespass, damage, sabotage, or other illegal or criminal acts. The physical security plan deals with prevention and control of access to the building. In some instances, a form of physical security may be already in existence, although not necessarily intended to prevent a bomb attack. To develop specific plans for your facility against a bomb attack draw upon any expertise that is available to you from police departments, government agencies, and security specialists. Don't leave anything to chance. Be prepared. There is no single security plan that is adaptable to all situations.

Develop guidelines for establishing an effective man-made disaster plan for your facility based on the following criteria:

- 1) Do all organization members know their own responsibilities as well as who bears the decision-making authority in any given situation? Establish clearly how and who will evaluate a bomb threat.
  - a) Management personnel should be given the authority to decide whatever action should be taken during the threat. The most serious of all decisions to be made by management in the event of a bomb threat is whether to evacuate the building. Essentially, there are three levels to consider when faced with a bomb threat:
    - i) Low level – A threat has been made giving no time, date, or area or was made more than twelve hours prior to being received.
    - ii) Medium Level – A more specific threat has been made identifying either time, place or type of threat. Partial or full evacuation would probably be mandated.
    - iii) High Level – The threat indicated that some type of incident is imminent. A bomb has been detonated or information has been received that a bomb will be detonated at a specific time and location. Evacuation is mandatory.
  - b) By using established procedures the bomb incident can be handled with the least risk to all concerned.

- c) If a complex situation exists, a multioccupant building for example, a representative from each occupant entity should be included in the communication of the plan.
  - d) This chain of command should be printed and circulated to all concerned parties.
- 2) Have all personnel been instructed, especially those at focal points of communications (i.e. receptionist, switchboard), in what to do if a bomb threat is received?
  - a) Decide what procedures will be followed when a bomb threat is received or device discovered.
  - b) Consider incorporating use of the State Bomb Threat Report form SFN 51502 into your plan.
  - c) Training is essential to deal properly with a bomb threat incident.
- 3) Has an evacuation unit been organized and trained, which will be responsive to the management's decision and has a clear understanding of the importance of its role?
- 4) Have procedures been established for notifying organization members? Decide what primary and alternate communications will be used.
- 5) Are evacuation procedures established and familiar to all employees? Provide an evacuation plan with enough flexibility to avoid a suspected danger area.
- 6) Is the current floor plan and occupant emergency information readily available for use by employees as well as police, fire, bomb search squads, and other emergency personnel?
- 7) Are emergency phone numbers current and/or published where they are readily accessible? Are they reviewed and updated frequently?
- 8) Have special procedures been established for evacuation of the physically challenged?
- 9) Has a procedure been established in the event that a written threat has been received? For example:
  - a) Save all material, including any envelope or container.
  - b) Once the message is recognized as a bomb threat, further unnecessary handling should be avoided.

- c) Avoid excessively handling the material. Every possible effort must be made to retain evidence such as fingerprints, handwriting or typewriting, paper, and postal marks.
- d) A threat should never be ignored.

10) Are search teams assigned to:

- a) Designate areas to be searched?
- b) Establish techniques to be utilized during search?
- c) Establish a procedure to report and track progress of the search and a method to lead qualified bomb technicians to a suspicious package?

11) Has a procedure been established as to what to do in the event a suspicious object has been discovered?

12) Has a procedure been established for the news media to be directed to one individual appointed as media spokesperson?

13) Is a contingency plan available if a bomb should go off?

Document your developed plan as an Emergency Man-Made Disaster Plan and communicate it to your employees.

## **SAMPLE PLAN:**

### **EMERGENCY MAN-MADE DISASTER PLAN**

- 1) Familiarize yourself with the location of the evacuation routes (primary and secondary), first aid station or kit, the nearest public telephone, and the location of the stairway (as indicated on the Emergency Evacuation Diagrams).
- 2) When a bomb threat or warning is phoned in, the person receiving the call should, to the degree possible, attempt to find out as much information as possible, using the Bomb Threat Report Form (SFN 51502) which has been issued to all employees to be retained by their telephone.
  - a) Do not hang up, let the caller terminate the call.
  - b) Get as much information from the caller as obtainable.
  - c) Get the exact time of the call.
  - d) Get the Caller ID (if phone has a Caller ID).
  - e) Write down the exact words the caller used.
  - f) Attempt to answer all the questions listed on the Bomb Threat Report as accurately and completely as possible.
  - g) Estimate the sex, race, and age of the caller.
  - h) Be alert to the nature/character of the caller's voice.
  - i) Listen for background noises.
- 3) Upon notification of a bomb threat or bomb emergency, personnel shall report the call **immediately to 911 (if available)**.
- 4) The recommendation to evacuate or reenter a structure/location during a bomb threat is the responsibility of the Management Response Team. However, due to the nature of some bomb threats, the Emergency Response Officials may direct the immediate evacuation of the structure/location.
- 5) If it is determined that the facility is to be evacuated, follow the emergency evacuation routes.
- 6) All cellular phones and two-way radios shall be turned off within a two-block radius of the threat. All communications to and from the threat scene shall be made by phone.
- 7) If an explosive device is alleged to be within the building but has not been located, the authorities will determine if a search is desired. Follow all instructions from the authorities.

- 8) Emergency Response Officials may ask employees or others with knowledge of the contents and layout of the building to assist in identifying any unusual parcels or items.
  - a) Searches of areas for explosive devices with instructions:
    - i) Be thorough.
    - ii) Each staff should look around their offices to see if there are any unusual packages or items in their work area. These should be reported to security. Only you will know what belongs in your office. Do not lock your office as this will hinder the bomb search.
    - iii) If necessary move people away from the suspicious item.
    - iv) Look for anything and everything that might conceal a bomb.
    - v) Do not panic persons in the area.
    - vi) DO NOT TOUCH, MOVE, OR JAR ANYTHING SUSPICIOUS THAT YOU MAY LOCATE.
  - b) The authorities will determine if the assistance of bomb disposal personnel and/or bomb detection canine may be requested.
- 9) If a suspected device is located, an evacuation of the area will be conducted based on available information.
  - a) Do not attempt to move or otherwise disturb the device(s).
  - b) If time permits, try to have people check their area before leaving.
  - c) Get people to take personal items such as purses, briefcases, gym bags, backpacks, lunch bags, etc., with them when they leave.
  - d) Only Emergency Response Officials will be allowed into the immediate area.
- 10) Personnel have been designated to help disabled employees or visitors seek shelter. More than one or two people will assume this responsibility to see that assistance is available.
- 11) Personnel have been designated to see that the evacuation is complete by checking areas where the alarm may not have been heard, such as restrooms and storage areas.
- 12) If a suspicious letter or package is received:
  - a) Inform your department coordinator immediately.
  - b) Ask around to see if anyone can identify package.
  - c) DO NOT OPEN IT!
    - i) Inform department staff and Building Coordinator as soon as possible.
    - ii) Contact the police department by calling 911 (if available).
    - iii) Give dispatcher description and location of package.



- iv) Follow the instructions given by the police.
  - v) Instruct staff to evacuate if told to do so by Emergency Response Officials.
- 13) All staff should relocate to a pre-designated area. You should be at least 300 feet away from the threatened building. A headcount should be made and any missing persons should be reported to security.
- 14) Employees should take their personal belongings with them when they evacuate because you may not be able to get back into the building for several hours.
- 15) No one will re-enter the area until authorities give permission.

## 4.6 Contingency and Disaster Planning

*Once a disaster or emergency happens,  
the time to prepare is over - all you can do is cope.*

### Vision Statement

In support of the National Strategy for Homeland Security, the state of North Dakota, through its emergency management infrastructure, will continually work to develop and implement an ever-evolving, comprehensive, secure, and compatible system that empowers all levels of state, local, and tribal entities, along with entities with key private assets and critical infrastructure, to prepare, respond, mitigate, and recover from all manner of natural, manmade, and technological emergencies and disasters.

### Background and Purpose

In support of the National Strategy for Homeland Security, on July 30, 2002, Governor Hoeven issued a directive to all state agencies to develop a continuity of operations plan to ensure the continuity of state government in the event of a manmade or natural disaster. To assist State agencies and facilities in this effort, Governor Hoeven established the Continuum of Government (COG) Team. The COG Team is comprised of representatives from the Office of the Governor, Emergency Management, Highway Patrol, Department of Health, Information Technology Department, Facilities Management Division, and Risk Management Division. The Risk Management Division of the Office of Management and Budget (OMB) serves as chairperson of the COG Team and sponsor of the project.

The COG Team directed the purchase of a web-enabled relational database software application - the Living Disaster Recovery Planning System (LDRPS) - to integrate the vast number of State operational plans and data into a single, coherent, usable State planning system. The decision was based on the knowledge that with COOP Plan software, a plan can be modified on the fly, allowing improvement of a situation and the ability to learn from mistakes, unlike a paper plan. LDRPS enables printing only those parts of the plan needed for any particular incident. It is faster to execute only the most crucially needed plans than page through a series of notebooks looking for a specific recovery procedure.

LDRPS is a web based system. This means that individual State entity LDRPS COOP plans are accessible through any internet service at [www.state.nd.us/ldrpsweb/](http://www.state.nd.us/ldrpsweb/). This process contains proper security so it can only be accessed on the internet with the property entity unique LDRPS User ID and LDRPS password.

A Continuity of Operations (COOP) Plan is a “living” document that changes as an organization changes. LDRPS®, provides the flexibility in plan design, data collection, importing and exporting of data, customization, report generation, online help, and plan maintenance that your entity needs.

To establish the State’s Continuum of Government process, it is necessary to differentiate between Continuum of Government (COG) Plans and Continuity of Operations (COOP) Plans.

***Continuum of Government (COG)*** is defined as the preservation, maintenance, or reconstitution of government’s ability to carry out the executive, legislative, and judicial processes under the threat or occurrence of any emergency condition that could disrupt such processes and services.

In other words, a COG Plan addresses:

- Maintaining order and control;
- Continuing the line of governmental authority and responsibility;
- Pre-delegation of emergency authorities;
- Emergency Action steps;
- Emergency Operating Centers;
- Safeguarding Vital Records; and
- Protecting government resources, facilities, and personnel.

***Continuum of Operations (COOP)*** is defined as the ability to reconstitute mission essential business processes and functions during and following any emergency that may disrupt normal operations and services for an extended period of time.

A COOP Plan addresses:

- Succession Plan and Delegation of Authority;
- Protection of Entity personnel, facilities, and resources;
- Identifying, positioning, and maintaining equipment for alternate facilities;
- Safekeeping vital records;
- Internal and external communications;
- Security; and

- Contingency planning.

Each agency and facility must develop a Continuity of Operations Plan. These plans, using common terminology, structure, and basic methodology, shall be used in the creation of the North Dakota State Continuum of Government (COG) Plan. The State COG Plan will formalize response, preparedness, mitigation, and recovery measures to ensure the executive, legislative, and judicial branches of state government can function under all circumstances.

## **Analyzing the Risk**

The number of potential threats to an entity's operations could be endless. In analyzing those that an entity might experience, some questions to consider are:

- Could the entity survive an extended failure of its facilities?
- Are vital business records properly inventoried and managed?
- Would business records be accessible or restorable after a disaster?
- Are the entity's facilities physically secured?
- What losses is the entity insured for, is the coverage adequate, and where is the entity intentionally or unintentionally self-insured?
- What is the entity's source of revenue and how could the cash flow be interrupted?

The answers to these question and many others should be derived through a comprehensive risk analysis that, at minimum, includes:

- An analysis of physical hazards;
- A service utility reliability study that looks at the company furnishing power to the agency's systems to determine reliability and emergency back-up sources;
- A review of the administration of vital business records;
- A security analysis;
- An examination of insurance coverages; and
- An analysis of revenue flow.

While every operation of an agency should be considered in business continuation planning, data processing and information systems, including the records and data center, merit special emphasis. Critical to successful recovery are the backup and restoration of data.

A well-developed and organized strategic plan will detail cost-effective steps to avoid the disaster, allocate the agency's valuable resources properly, and restore the agency and its critical operations quickly.

The COOP does not plan for the immediate or even eventual replacement of all existing resources at an alternate site. Rather, it is intended to implement a viable and effective office in an alternate location for an undetermined period of time to perform only those functions essential to the mission.

The LDRPS ND COOP Business Unit Plan Assistant; ND COOP Facility Recovery and Restoration; ND COOP IT Function; and ND COOP IT Infrastructure documents were designed to assist in identifying and properly addressing your entity's risk.

## **Tips for Developing your COOP Plan**

Business continuation planning has two phases: 1) analyzing the entity's current state of disaster preparedness, and 2) developing the plan. The involvement of knowledgeable, experienced personnel in developing the plan is vital to its effectiveness. Every entity must assign its safety director or other responsible employee to 1) complete a risk analysis, and 2) develop a strategic business continuation plan. The entity must also determine the importance of the plan in its operations and how much time and resources will be allocated to the process.

Keep in mind that many of the tasks that are part of our ongoing operations are now being handled by possibly one person with the help of a piece of equipment when in the past, that task was manually being done by maybe three or four people. That means we may have only one person who knows what needs to be done in order to continue to provide that service. What if that person is not available in the event of an emergency? Even if we can get access to the piece of equipment, will there be someone who can accomplish the task?

Similarly, in the event of an emergency there will be materials that will need to be replaced. Consideration should be made to the fact that vendors routinely keep less stock on hand. How can you ensure you will have access to the materials that you will need?

Do you have backup personnel identified in the event an initial responder is not available? Is any personnel you have designated to respond in the event

your COOP plan is activated committed to respond in some other capacity, i.e., a member of a volunteer fire or medical service, a member of the National Guard? Be sure to confirm designated essential personnel are able to fulfill assignments.

## Key Plan Components

The plan should contain these key components:

**Disaster Avoidance** - Avoiding interruption through prevention measures and back-up systems is the true goal of business continuation planning. Entity systems should have appropriate protection devices, systems redundancies, and administrative controls in place.

**Emergency Preparedness** - No matter how many and what kind of prevention measures are in place, unexpected events can happen. Defining a routine to effectively deal with these events can reduce their impact and minimize the interruption potential.

**Identification of Functions and the RPO/RTO Impact on a Disaster Recovery Business Resumption Plan** - Once the State entities have determined whether identified functions are Essential, Vital, Necessary, or Desired (See, [www.state.nd.us/cog](http://www.state.nd.us/cog)) the entity must identify each business functions' Recovery Point Objective (RPO) and Recovery Time Objective (RTO). In the event of a disaster or audit, entities need to know when they can recover or locate their information.

One of the first steps in this process is determining the data essential for the survival of your entity's business. Not all types of data are the same. Most of your organization's data is valuable. Some of it is *extremely valuable and/or absolutely critical to the survival of your entity's business* – **mission critical** data. Mission-critical data would have the shortest RPO. The shorter the RPO, the more current your backup data needs to be. The data that is classified as mission-critical requires up-to-the minute data currency (the most current data available) to ensure that the recovery point is seconds or minutes, rather than hours, days, or even weeks.

The closer each number is to the disaster, the more expensive the budget cost will be. For example, if an essential function had an RPO of less than one hour, it would be necessary to have the information continually backed up so that the information is mirrored offsite. Naturally, there are IT costs associated with that type of recovery. The key principle involved is that only those functions that *must be performed because they are key to the*

*survival of the organization* should be listed as a top priority. But remember, the priorities of an entity may change as the duration of the service interruption lengthens. For example, a function that can sustain a delay of 3 days may become a top consideration if the interruption lasts a week.

Determining the RPO/RTO formula for an identified function can be defined as:

**Recovery Point Objective (RPO)** - In a disaster you will generally lose data. The *Recovery Point Objective* is the time (relative to the disaster) to which you could potentially recover your data. For example, if you make overnight backups, the recovery point objective could be the end of the previous day's activity.

**Recovery Time Objective (RTO)** - This is the time period after a disaster at which a business function needs to be restored. Different business functions have different recovery time objectives. For example, the recovery time objective for the payroll function may be two weeks, whereas the recovery time objective for issuing a license may be two days.

**Cost of Downtime** - A state entity should calculate the potential losses it could incur, both as the result of a down time associated with the disaster and in recreating lost data.

**Balancing the Tradeoffs** - In an ideal world, organizations would develop backup processes that support up-to-the-minute currency for all their data. In the real world of limited resources, because of the costs involved, this approach just isn't feasible. Organizations must balance the tradeoff between currency of data and investment in resources. Getting this balance right is essential. Under-investing in data currency can result in the collapse of the entity in the event of a disaster. Over-investing in protecting non-critical data can tie up valuable resources better used elsewhere in your disaster recovery and Continuity of Operations programs.

**Continuous Backup Maximizes Data Currency** - State entities will need to work with ITD to develop and implement appropriate backup technologies and processes once data has been classified according to Recovery Time and Recovery Point Objectives. For the most critical data with the shortest RPO, a solution such as electronic vaulting that supports continuous backup will need to be implemented. Unlike periodic backup processes that ensure recovery of data only up to the point that the backup

was done, continuous backup closes the window for potentially lost data. While you can never absolutely guarantee zero loss of data, continuous backup solutions can minimize data loss to minutes or even seconds.

**Data Recovery Budget** - The following criteria can assist in determining the criticality of business functions. There may be others that are of importance to a State entity.

- ◆ Maintenance of public health and safety.
- ◆ Income maintenance for citizens.
- ◆ Income maintenance for government employees.
- ◆ Payments to vendors for goods and services.
- ◆ Requirements for compliance or regulation.

Once the agency has identified its vulnerable areas, it can begin to develop a strategic plan that addresses potential causes of business interruption.

**Alternate Facilities** - Each entity should designate alternate operating facilities as part of its Contingency Plans, and prepare its personnel for the possibility of unannounced relocation of essential functions and/or Contingency Plan “core” staff to these facilities.

Alternate facilities to consider:

- Similar Business Location
  - State office to like County office
  - State Bank to private Bank location
- Remote sites of parent entity to subordinate locations.
- School Locations (Elementary, High School, Colleges, and Universities).
- Local National Guard Armory (access may be limited).

<b>Evaluation Characteristic</b>	<b>Alternate Site Planning Considerations</b>
Compatibility	Hardware, software, and communications that are or would have to be installed at the alternate site must be the same as or compatible with original equipment supported.
Accessibility	The alternate site must be readily accessible, but not so close as to share the same disaster.



<b>Evaluation Characteristic</b>	<b>Alternate Site Planning Considerations</b>
Reliability	The alternate site must be capable of supporting the operations of the affected office(s) 24 hours a day, seven days a week. Maintenance for site equipment, hardware, and communications should be on-site or on-call.
Capacity	The alternate site and facility/computer equipment must have sufficient floor space, heating/cooling/power, communications lines, and memory capacity to support the suite of equipment required.
Security	The physical security at the alternate site must be sufficient to protect the sensitivity of the information and data.
Time to prepare	There must be sufficient time to prepare for the disaster, including time to prepare/convert data and software, prepare the site, prepare/store supplies, forms and documentation, obtain/install power and communications circuits, and prepare and test the Contingency Plan.
Support & assistance	There must be on-site technical support and assistance to set-up and configure the hardware, software, and communications.
Cost	<p>Cost factors can be subdivided into three categories:</p> <ul style="list-style-type: none"> <li>▪ Preparation costs include cost of any equipment or LAN/WAN.</li> <li>• Maintenance costs include hardware, software, or telecommunications maintenance/lease fees.</li> <li>• Execution costs are incurred in declaring a disaster and executing the Contingency Plan, including rent, travel, and per diem.</li> </ul>

For additional assistance contact the Emergency Relocation Committee at Risk Management (701-328-7584).

## Interoperable Communications

The success of entity operations at an alternate facility is dependent upon the availability and redundancy of critical communications systems to support connectivity to internal organizations, other entities, critical customers, and the public.

## Testing

Once plans are developed, it will be necessary to test them to ensure the continuity of operations and the availability of critical resources in the event of a disaster. Testing will need to be done at a minimum of once a year.

## Resources

The website established by the State's COG Team and accessible through the Risk Management Division website, [www.state.nd.us/risk](http://www.state.nd.us/risk) will provide the most up-to-date version of instructions for developing a plan, checklists to assist in development of an effective plan, a list of frequently asked questions, a report on recommended current activities for state agencies and facilities to ensure they are in compliance with the Governor's directive, and a list of State COG Team leaders.

## Emergency Notification Software: NotiFind

The State COG Team purchased an emergency notification system called NotiFind that interfaces with the State's continuity planning software, LDRPS. NotiFind ensures timely and effective contact with key personnel in the time of an emergency to deliver critical messages, provide important data for the operation of the State's COG and COOP procedures, and establishes a toll-free Message Center where contacts can listen to messages such as location-specific alerts and emergency information.

There are two efficient methods to use NotiFind —“*Notification Lists*” or the “*Message Center*.”

**Notification Lists** can be established from team lists developed in LDRPS or by lists independent of LDRPS. Only one message needs to be developed. NotiFind will then deliver that message via voice message, text, or both, depending on the communication method that ultimately contacts the recipient. The message recipient may designate up to 5 different methods for NotiFind to use to contact him or her. The

first method may be by office telephone. If the person is not available, NotiFind would try a cell phone number. If still no contact was made, the third method of contact could be an e-mail message retrievable by a desktop PC or a Blackberry. The fourth method could be a home telephone number, the fifth a home cell phone number. The system would use that sequence in its attempt to notify the recipient and then provide a report as to when and how the message was delivered.

***Message Center*** enables employees to dial into a toll-free number to listen to specific alerts or important instructions. Using the Message Center provides more opportunities for mass communication due to the fact it eliminates the need to register recipients' contact information in the NotiFind database. Employees are provided access (PIN) codes which enable different messages to be placed into the system and ensures that callers access only the message(s) pertinent to their situation.

To ensure consistency between LDRPS and NotiFind, the person who enters your entity's personnel records into PeopleSoft must make changes in telephone numbers or contact information.

## 4.7 State Fleet Services

### Regulations for Operating State Fleet Vehicle

1. Drivers must possess a valid driver's license that authorizes the driver to operate State vehicles. Drivers must have their license in their possession at all times when operating a State vehicle, and the license must be of the appropriate class governing the vehicle being operated.
2. Drivers must comply with all laws and regulations relating to the operation of motor vehicles, including those governing the consumption of alcohol and vehicle speed. Drivers convicted of driving under the influence of alcohol or drugs may not drive a State vehicle during the time they are required to file a Proof of Financial Responsibility Form (SR-22).
3. State Fleet Services will notify agency directors of violations. It is recommended the agency then submit a written response describing the disciplinary action taken to improve the driver's driving behavior.
4. Drivers must immediately report all accidents involving State vehicles to their agency director and State Fleet Services in Bismarck. The driver also must complete the Risk Management Fund Motor Vehicle Accident Report (SFN 51301). A copy of this form can be found in Section 3.5. A serious accident should be reported by dialing 911 and then reported to State Radio advising State Radio that it is a Risk Management accident.
5. Drivers may allow people who are not State employees to ride in State vehicles only as necessary to conduct state business.
6. All State employees must wear properly fastened safety belts whenever traveling in State vehicles. The driver must remind passengers of this policy and verify their compliance with it.
7. Radar-detecting devices are not allowed in State vehicles.
8. Winter survival gear may be provided by the user agency for use in the vehicle.

Each agency is responsible for the actions of its authorized drivers and must institute proper disciplinary actions for any violation of these regulations.

## Reporting Accidents

Information on reporting vehicle accidents and losses can be found in subsection 3.1 of this manual.

## Defensive Driving

Defensive driving is anticipating what the other driver might do and acting in time to avoid a collision. All State Fleet regular operators (those who drive monthly) are required to complete the four-hour National Safety Council Defensive Driving Course, along with a refresher course every three to five years.

## Operating Large Passenger Vans

The following policy was approved by State Fleet Services April 18, 2002, to become effective May 1, 2002.

1. This policy applies to operation of state owned or leased large passenger vans.
2. “Large passenger vans” means motor vehicles designed or intended to carry more than 10 but less than 16 occupants, hereafter referred to as “LP vans”.
3. Operation of LP vans is limited to authorized persons who currently have a valid driver’s license and:
  - Have not been convicted of any criminal driving offense within the last three years;
  - Have not had any driving violations resulting in assignment of six or more points within the last three years; and
  - Have completed a State Fleet approved van driver safety program. (Certain exceptions may apply. See Implementation guidance for details). A van driver safety program means a program that includes both classroom and behind the wheel components. The behind the wheel component is to require driving the vehicle loaded to rated capacity with passengers or simulated passengers distributed as passengers would be seated.
4. All occupants of LP vans must use seat belts at all times when the vehicle is in motion.

5. Drivers of LP vans shall not use a phone while the vehicle is in motion. Radios used for dispatch are permitted.
6. Drivers of LP vans shall not exceed posted speed limits and must exercise care required and reduce speed accordingly when conditions dictate.
7. Drivers of LP vans are limited to 10 consecutive hours and 14 total hours of operation in any given 24 hr period. Drivers who operate for 10 consecutive hours must be given at least 8 consecutive hours off duty before resuming driving. For trips requiring more than 10 consecutive or 14 total hours of operation in any given 24 hr period, 2 or more qualified LP van drivers are required to provide adequate relief. In addition to limits on hours of operation, user entities need to be concerned about the danger of having people that may be emotionally and/or physically exhausted from an event being required to immediately drive back to home station, usually at night, and often into the early morning hours. Therefore, when LP vans are used to transport athletic teams, no participant shall drive for more than two hours on the return trip. Participants are defined as the head coach and assistant head coach and players who were active in the official event. The non participant restriction applies to the return trip only and then only if the trip has a duration of longer than 2 hours. In addition, the non participant restriction shall not apply to driving that takes place between sunrise and an hour after sunset. Return trips shall be scheduled so that arrival at home station is no later than 2 a.m. This provision is not intended to prevent completion of a trip that was unexpectedly delayed or slowed en route.
8. State Fleet Services Policy, as stated in the Policy Manual, applies to LP van operation. If there is duplication or conflict between this policy and the Policy Manual, the stricter standard will apply to LP van operation.

## **IMPLEMENTATION**

Implementation will be as follows:

Agencies and universities are to identify LP van drivers and arrange for them to be trained as set forth below.

1. All LP van drivers are required to complete the classroom component. User agencies may exempt certain individuals from the behind the wheel component. These include Commercial Drivers License (CDL) holders, those with experience driving LP vans carrying at least 11 passengers

and casual or occasional drivers that may move empty vehicles about one time only or from time to time.

2. Implementation will be phased, with the classroom component first and the behind-the-wheel component second. State Fleet will grant the time necessary for users to implement this policy.
3. The classroom component will be web-based training. Agencies and universities are to arrange for computer access for the selected individuals. Cost for the license to use the web based course for the classroom component will be paid by State Fleet. Agencies/universities are responsible for monitoring their own drivers and ensuring compliance with this policy. State Fleet will establish and maintain review capability and will review compliance from time to time.
4. The behind the wheel component will be a course per State Fleet direction. The cost of LP van use in completion of the BTW component will be paid by user agencies and institutions.
5. Incidental costs, such as transporting students to training sites, will be borne by user agencies and universities.
6. Point of contact for questions regarding this policy is State Fleet Risk at 328-1472.

## **4.8 Addressing Employment Practices Liability (EPL) Exposures**

### **■ Proactive Steps to address EPL**

Federal and State laws require employers to take affirmative steps to provide a safe workplace. Establishing and implementing proper policies and procedures to address harassment, workplace violence, hostile work environment, appropriate Internet/E-mail use, and substance abuse may provide the State an affirmative defense in the event of a claim or lawsuit.

Based upon case law and legal advice, Risk Management recommends these best practices for all state agencies and facilities:

- 1) Develop adequate EPL policies and procedures;
- 2) Provide training to supervisors and managers on how to implement the policies and procedures; (See on-line training module)
- 3) Ensure that each employee, whether temporary or permanent, and all volunteers are trained on the policies and procedures at the time of hiring. The training should include:
  - Providing each newly hired employee with copies of the policies and procedures for their review;
  - Requiring each newly hired employee to sign a statement (see sample statement) that they have read and understand the policies and procedures;
  - Incorporating a review of the policies and procedures into the annual performance review of each employee by requiring the employee to acknowledge in writing that they have been provided copies of the policies and procedures, that they have read them, have discussed any questions with their supervisor, and that they understand them;
  - Identifying at least 2 separate individuals who complaints may be filed with;
  - Assuring discretion in the investigation of an allegation; and
  - Ensuring no retaliation to the reporting employees.
- 4) Ensure employee training is documented for all employees and volunteers and that the documentation is retained for a period of six years; and
- 5) Ensure any claims reported are thoroughly investigated and resolved and that investigation and resolution is documented.



The following is a sample employee acknowledgement to address EPL exposures.

### **Employee Acknowledgment**

I acknowledge that I have received a copy of (the name of agency or facility) policies and procedures regarding Sexual Harassment, Workplace Violence, Hostile Work Environment, Substance Abuse, and Proper Internet/E-mail Use in the Workplace. My signature means that I have reviewed these documents and discussed the contents with my manager.

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*Employee Signature/Date*

## **■ Response to EPL Complaints**

To limit potential liability, employers should immediately respond to complaints of harassment, violence or threats of violence, and discrimination. Further, such complaints usually should be handled through a formalized process. Line supervisors generally should not attempt to resolve such issues alone but rather should notify top management and human resource personnel for an organizational response. Additionally, the employer's response to a complaint should be carefully documented.

### **I. The Complaint**

An employer typically learns of inappropriate workplace behavior through an employee complaint. The first step an employer must take is to ascertain as much information about the allegations as possible. The person receiving or handling the complaint should ask the complaining employee:

- What happened?
- When did it happen?
- Has it ever happened before?
- Has it happened to anyone else?
- Who was present when it happened?

- Have you talked with anyone about the incident(s)?
- To what extent was the behavior welcome or unwelcome?
- Was it conveyed to the alleged harasser that the behavior was unwelcome?
- Is there any other information you may have that would substantiate the allegation(s)?

Additionally, the complaining employee should be encouraged to detail the allegations in writing. However, an employer cannot ignore its responsibility to investigate a complaint simply because an employee refuses to put anything in writing. Likewise, an employer cannot ignore anonymous complaints of inappropriate workplace behavior.

The general tone of the initial contact with the complainant should reassure the employee that the agency will take the complaint seriously and that the employee is to be commended for coming forward.

When first meeting with the complaining employee the procedures for conducting a workplace investigation should be discussed. The employer's policy of prohibiting retaliation and how to report it should be discussed with the employee. The employee should also be instructed not to discuss the investigation with other employees until the investigation is complete.

Although an employer can reassure an employee that they will generally try to proceed in as confidential a manner as possible, an employer should not in any way promise or guarantee confidentiality.

Lastly, the complaining employee should be asked for input as to what should be done to remedy the problem. However the employee should be told that, although his or her suggestions will be considered the employer has an obligation to decide independently what corrective action should be taken.

## **II. Evaluating the Complaint**

After obtaining an allegation, the employer must evaluate the information it has received to determine whether to proceed with a formal workplace investigation.

Many identified problems can be quickly remedied without the need for a formal investigation. However simply telling an alleged harasser to "steer clear" of the complainant and other responses that do not determine whether the alleged conduct occurred are not sufficient.

As a general rule, where the allegations are serious in nature, identify a complex problem, involve a number of employees, or where the relevant facts are likely to be in dispute an employer should usually proceed with a formal investigation, so, even in cases where the problem is quickly and informally resolved, the matter should be documented with the complaining employee acknowledging that the problem has been remedied.

Additionally, an employer should evaluate a complaint to determine whether any interim action is necessary. Interim action can include temporary job reassignment, allowing a complaining employee time off, or suspending an accused harasser with any pending completion of an investigation. Although each case is dependent on its own set of facts and circumstances an employer generally should take only those interim actions necessary to protect an employee or preserve the integrity of the investigation process. Allegations of harassment involving rape, battery, physical touching or other extreme conduct will often necessitate some form of interim actions being taken. Interim measures, however, must always be reviewed to make sure that the complaining employee is not negatively impacted. For example, reassigning a complainant to a less desirable position may be considered a form of retaliation.

### **III. Planning the Investigation**

After making a decision to conduct a formal workplace investigation, an employer should formulate a plan concerning how to proceed with the investigation. The plan should identify:

- Who will be conducting the investigation?
- What documents (e.g. personnel files) will be looked at?
- Who will be interviewed?
- The order in which people will be interviewed.
- Standard information that each person will be told as part of the interview process.

The investigators chosen to conduct the workplace investigation must be neutral, objective and free from any perceived bias. The investigators must understand their role, the issues to be investigated, and have available sufficient time to investigate the complaint thoroughly. The investigators must be capable of instilling confidence in the process while still remaining firm enough to ask difficult questions. Individuals chosen to conduct a workplace investigation should make credible and effective witnesses should it be necessary to justify the findings later. In certain case where the complainant is a woman it may be advisable to have at least one woman on the investigation team should sensitive questions of a sexual nature need to be asked. Lastly, where the alleged harasser is a high level official in the organization it is often advisable to choose individuals from outside the organization to conduct the investigation to avoid claims that the investigators were biased or felt constrained in their investigation.

The investigation planning process should also include preparing for employee interviews. In most circumstances a list of standardized questions should be prepared. Standard responses to likely questions those being interviewed will ask the investigators should also be developed. Additionally, a standard opening and closing statement to be given at each interview should be prepared.

Lastly, before the investigation actually begins an outline of the planned investigation detailing the issues to be investigated, the facts as alleged by the complaining employee, and who will be conducting the investigation should be sent to the complaining employee to verify that the planned investigation will address the concerns raised. This practice avoids potential misunderstandings that could result in investigations that fail to address an employee's primary concerns. It also gives the complaining employee an opportunity to raise any objections he or she may have as to the identity of the investigators.

#### **IV. The Investigation**

The key to an effective workplace investigation is to obtain as much information a possible. The investigation should include interviews with every person identified as potentially having information. The investigation should follow up on every lead or related allegation. This may result in people being interviewed and reinterviewed a number of times.

At the outset of each initial interview, the investigators should explain the purpose of the investigation and what is expected of the employee. Each person interviewed should be told that although the

employer takes the allegations seriously no conclusions have yet been made. Each employee should be told that they have a duty to answer all questions that are asked and disclose all information they have relevant to the allegations. Employees should be told that their failure to cooperate with the investigation may result in disciplinary action up to and including termination. Each employee should also be instructed not to discuss the investigation with other employees until the investigation is complete. Lastly, the employer's policy of prohibiting retaliation and the consequences for employees that engage in retaliatory conduct should be explained.

During the interviews, the investigators should strive to engage in effective questioning. Generally, broad standard questions should be asked first, followed up with more specific questions depending on the interviewee's response. Each person interviewed should be asked to put things in chronological order or otherwise identify relevant time periods. Each person giving pertinent information should be asked whether anyone else was present or can otherwise substantiate the information. Questions which might test the veracity of the person interviewed should also be asked if possible.

At the conclusion of each interview, employees should be asked whether they have any additional information regarding inappropriate workplace behavior. Each person interviewed should be told that if they remember any other pertinent information they should contact the investigators. Additionally, each person interviewed should be asked to acknowledge or correct the investigators' understanding of the answers to the questions posed. In many cases obtaining a signed statement from each employee summarizing the interview and the employee's responses is a good practice. However, agencies need to be aware that such documents will be subject to the open records law. Lastly, each person interviewed should be reminded that they are not to talk about the investigation and that retaliation in any form will not be tolerated.

Throughout the investigation process, an employer should strive to balance the needs of ending harassing behavior with protecting the rights and reputation of both the complainant and the accused. To avoid potential defamation claims, excessive publication of the charges and information received during the investigation should be avoided. Investigators, agency officials, and other employees should refrain from discussing the charges and related information outside of the context of the investigation. The allegations and information obtained during the investigation should be

maintained as confidential as possible within the limitations of state and federal law (e.g. open records law).

## **V. Evaluating the Information**

After obtaining all of the information available, the investigators need to evaluate the information to determine what facts are supported by the investigation. It is important that the investigators base their findings on competent information coming from individuals' personal knowledge. Findings based on hearsay, innuendo and rumor are highly suspect and may expose the employer to liability should the employer act on such information. Continuing the investigation may be required to obtain first hand information.

Additionally, the investigators may need to make some credibility assessments to make factual findings. In assessing credibility the investigators should consider the interviewee's demeanor, whether the interviewee's statements were consistent, whether the interviewee's description of events is logically consistent with the statements of others, whether the interviewee's description is plausible or farfetched, and whether the interviewee was fully cooperative with the investigation process. After resolving any conflicting statements and assessing credibility the investigators should detail their findings in an investigation report which typically would go to upper management to decide on what corrective action to take.

## **VI. The Investigation Report**

The investigation report should outline the findings of the investigators and should describe how the investigation was conducted. Because the report may be evidence in future proceedings, the report should be written in a manner which clearly and persuasively supports the ultimate findings that were made. For example, if credibility was a determinative factor, the report should identify how and why one person or one description of events was more credible than another. Additionally, the findings should not be written in legally conclusory terms (e.g. "hostile work environment," "discriminatory," "sexual harassment"). Rather the findings should be couched in terms of the specific unacceptable conduct at issue.

Because the investigation report can be such an important document a draft version of the report should be reviewed by legal counsel before the report is finalized. Legal counsel can help identify legal issues as well as

help determine whether certain facts meet certain legal standards. Legal counsel can also help identify what forms of corrective action may be legally appropriate.

## **VII. Taking Corrective Action**

After an investigation and report is completed management must decide what corrective action, if any, should be taken. Corrective action can take the form of a simple memo to all employees reminding them that certain conduct and discussions are inappropriate and will not be tolerated in the workplace or it can go all the way to terminating one or more employees. What level of response is appropriate necessarily depends on what conduct is involved, who is involved, and whether similar conduct has occurred in the past. The corrective action taken, however, must end the harassment. It is also important to remember that an employer has an obligation to do follow up monitoring to ensure that the harassment has stopped.

In those cases where the alleged harassment cannot be substantiated, the employer should nevertheless go over the employer's policies prohibiting harassment with the complainant and the accused. The complainant should specifically be told that the employer intends to protect the employee from inappropriate workplace behavior and that the employee should report any subsequent incidents of perceived harassment or retaliation. The alleged harasser should be told in the strongest terms that any acts of harassment or retaliation will result in disciplinary action being taken, up to and including termination. Although no formal disciplinary action should be taken in those cases where the harassment could not be substantiated, the employer should consider the possibility of a transfer as a means of separating the complainant and the alleged harasser. However, again, care must be taken to ensure that the transfer does not impact the complainant negatively or operate as a disciplinary measure being imposed upon the alleged harasser. Lastly, in many cases, especially where the allegations are widely known amongst employees, the employer should reiterate to all employees its policy of prohibiting all forms of harassment and retaliation against those that report inappropriate workplace behavior.

Where inappropriate workplace behavior is substantiated, questions an employer should ask in determining what corrective action to take include:

- Was the incident an isolated incident or does it reflect a pattern of inappropriate behavior?

- Was the incident severe enough to objectively create a hostile work environment?
- Is the person that engaged in inappropriate workplace behavior a supervisory employee?
- Has any supervisory employee failed to report or act on known or suspected harassment?
- What were the prior relationships between the employees involved?
- Did the incident involve inappropriate physical touching? Verbal abuse or merely inappropriate discussions?
- Did the complaining employee in any way indicate that the behavior was welcomed?
- Have there been past instances of inappropriate workplace behavior at the job site?
- Were verbal comments made in a derogatory or hostile fashion or merely unintended offensive utterances?
- Is there anything which would indicate that women or any other protected class were singled out for differential treatment?

However, it is important to recognize that even in those situations where it is determined that the complained of acts were not unwelcome or not severe or pervasive enough to create an objectively hostile work environment, employers should still generally take some corrective action to deter inappropriate workplace behavior which if left unchecked could run the risk of giving rise to a later hostile work environment claim. Employers should take a zero tolerance approach. Inappropriate workplace touching should not be tolerated regardless if it is welcome or unwelcome. Inappropriate language, jokes, or discussions of a sexual, ethnic, racial, religious or other suspect nature should not under any circumstances be tolerated in the workplace.

## **VIII. The Final Investigation File**

Because an employer may be called upon to show how it responded to claims of harassment, violence or discrimination long after the fact, the



final investigation report, all supporting notes and memorandum generated during the investigation, and documents relevant to any corrective action taken should be maintained in a final workplace investigation file. This file should be maintained separately from any employee's personnel file.

An investigation checklist and a PowerPoint presentation for managers concerning responding to allegations of harassment or discrimination claims can be found on the Risk Management web site.

## 4.9 Automatic External Defibrillators

The automated external defibrillator (AED) is a computerized medical device that can check a person's heart rhythm. It can recognize a rhythm that requires a shock and it can advise the rescuer when a shock is needed. The AED uses voice prompts, lights, and text messages to tell the rescuer the steps to take.

Currently, the Risk Management Division does not recommend for or against having AEDs in state agencies. Risk Management recognizes that AEDs can be effective, life-saving devices if utilized properly. If not utilized properly, AEDs can have serious medical and liability exposures. Risk Management's position is simply that if an agency or facility intends to implement an AED program, it must ensure on-going compliance with all applicable federal, state and local legal requirements. If an agency or facility cannot dedicate on-going time and resources to meet these requirements, it should avoid placement of AEDs in its facility.

Public access to defibrillation (PAD) means making AEDs available in public and/or private places where large numbers of people gather or people who are at high risk for heart attacks live.

Although AEDs can be amazing life-saving devices, they are not without legal ramifications. Public access refers to accessibility for trained users to use AEDs in public places. Public access does not mean that any member of the public witnessing a sudden cardiac arrest should be able to use the device. AEDs are to be used only by individuals with the proper training and certification in accordance with federal, state and local laws.

The federal requirements for AEDs have been established by the Food and Drug Administration (FDA). The American Heart Association (AHA) has established guidance for compliance with the federal regulations and for starting a PAD program. Numerous resources, forms and templates can be found on the AHA's website [www.americanheart.org](http://www.americanheart.org).

The state requirements can be found at N.D.C.C. §32-03.1-02.3. Although this is the Good Samaritan Act, there are several requirements that need to be met prior to being granted the liability protections under the statute.

The bottom line is that to avoid liability for use of AEDs at your facility you need to consider various factors, including:

- choosing a program manager;

- on-going compliance with federal, state and local laws;
- placement; and
- who and how many employees will be trained to represent the response team.

Proper documentation of the planning, implementation, and management of an AED program will ensure that your facility has a safe and effective program.

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In November 2005, the AHA released new guidelines for CPR and ECC (Emergency Cardiovascular Care). Those guidelines can be found at [www.americanheart.org/presenter.jhtml?identifier=3035517](http://www.americanheart.org/presenter.jhtml?identifier=3035517) and affect the use of AEDs. According to AHA, “*the emphasis on providing high quality CPR with fewer interruptions is also reflected in the changes to the new guidelines for using a defibrillator. For example, rescuers are advised to use only one shock before resuming CPR, rather than three, as previously recommended.*”  
[www.americanheart.org/presenter.jhtml?identifier=3036362](http://www.americanheart.org/presenter.jhtml?identifier=3036362)

The AED changes are summarized in AHA’s *Currents*, Vol.1 6 No. 4 Winter 2005-2006,  
[www.americanheart.org/downloadable/heart/1132621842912Winter2005.pdf](http://www.americanheart.org/downloadable/heart/1132621842912Winter2005.pdf):

When attempting defibrillation, all rescuers should deliver 1 shock followed by immediate CPR, beginning with chest compressions. All rescuers should check the victim’s rhythm after giving about 5 cycles (about 2 minutes) of CPR. Once AEDs are reprogrammed by the manufacturers, they should prompt rescuers to allow a rhythm check every 2 minutes.

While these new guidelines do not currently *require* AEDs to be reprogrammed, it is *recommended* by AHA. As a result, Risk Management endorses this recommendation and suggests that:

- 1) each agency/facility currently utilizing an AED contact the AED manufacturers about reprogramming the machines to support the new guidelines,
- 2) revise the PAD program accordingly, including documentation from the manufacturer if the AED is not reprogrammable; and
- 3) update and renew AED training.

References:

American Heart Association and URMIA White Paper on Automated External Defibrillators and PAD Programs

## 4.10 First Aid Kits

### First Aid Kits

Each State agency and facility must ensure adequate first-aid supplies are readily available to each employee and are easily accessible in each work or activity area. Each kit must be stocked with necessary supplies for the potential of injuries in the area. The kit should be inspected on a regular basis, restock supplies that have been used and replace supplies with lapsed expiration dates. The inspection must be documented. (See First Aid Kit Checklist below.) Make certain the kit contains one-way microshield CPR devices, disposable gloves (protective), and does not contain oral medications. It is imperative that state employees or volunteers, while acting in their official capacity, never administer or give any type of oral medication to anyone.

The kit should be easily transportable and located in a well-marked and easily accessible area.

#### FIRST AID KIT CHECKLIST

Location \_\_\_\_\_

Checked By \_\_\_\_\_ Date \_\_\_\_\_

\* The following represents a general checklist of the “essential” items and may need to be customized to correspond with the work/activity area and the level of training of the individuals administering the first aid.

Item	Status	Date Restocked
Adhesive Bandages		
Adhesive Tape		
Antiseptic Wipes		
CPR Microshield		
Disposable Gloves		
Elastic Bandages		
Gauze Compresses		
Scissors		
Stretch Bandages		
Tweezers		

CODING: **P** = Present at time of inspection    **R** = Restocked at time of inspection    **X** = Out of stock (notify and reorder immediately)